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- The Modern Management of Epilepsy
- Maltese Medical History as seen Through Postage Stamps
- Management of Neck Lumps
- Diabetes Health Care - Targets & Essentials for Treatment
- Neurophysiology of Acupuncture
- Letters to the Editor



The power to succeed
in everyday infections.

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Success that rises above resistance.

PRESCRIBING INFORMATION

INDICATIONS

Upper Respiratory Tract Infections e.g. Sinusitis, tonsillitis, otitis media. **Lower Respiratory Tract Infections** e.g. Acute and chronic bronchitis, lobar and bronchopneumonia, empyema, lung abscess. **Skin And Soft Tissue Infections** e.g. Boils, abscesses, cellulitis, wound infections, intra-abdominal sepsis. **Genito-Urinary Tract Infections** e.g. Cystitis, urethritis, pyelonephritis, septic abortion, puerperal sepsis, pelvic infections, chancroid, gonorrhoea. **Other Infections** e.g. Osteomyelitis, septicaemia, peritonitis, post-operative infections. AUGMENTIN intravenous is also indicated for prophylaxis against infections which may be associated with major surgical procedures involving gastro-intestinal, pelvic, head and neck, cardiac, renal, biliary tract and joint replacement surgery.

DOSAGE

Adults and Children Over 12 Years. Oral:- Mild-moderate infections: One 375mg AUGMENTIN tablet three times a day. Severe infections: One 625mg AUGMENTIN tablet three times a day or two 375mg AUGMENTIN tablets three times a day. The 625mg AUGMENTIN tablet is not available in all countries. **IV Injection/Infusion:-** Usually 1.2g 8 hourly. In more serious infections increase frequency to 6 hourly intervals. **Children.** Oral:- Children 7-12 years: 10ml AUGMENTIN 156mg syrup three times a day* or 5ml AUGMENTIN 312 mg syrup three times a day*. Children 2-7 years: 5ml AUGMENTIN 156mg syrup three times a day*. Children 9 months-2 years: 2.5ml AUGMENTIN 156mg syrup three times a day*. Children 0-9 months: No suitable oral presentation is currently available for this age group. *In severe infections these dosages may be doubled. Treatment with AUGMENTIN should not be extended beyond 14 days without review.

CONTRA-INDICATION

Penicillin hypersensitivity.

PRECAUTIONS Changes in liver function tests have been observed in some patients receiving AUGMENTIN. The clinical significance of these changes is uncertain but intravenous AUGMENTIN should be used with care in patients with evidence of severe hepatic dysfunction. In patients with moderate or severe renal impairment AUGMENTIN dosage should be adjusted as recommended in the Package Insert Leaflet.

USE IN PREGNANCY AND LACTATION Use of AUGMENTIN in pregnancy is not recommended unless considered as essential by the physician. During lactation, trace quantities of penicillins can be detected in breast milk.

SIDE EFFECTS Side effects, as with amoxicillin, are uncommon and mainly of a mild and transitory nature. Diarrhoea, pseudomembranous colitis, indigestion, nausea, vomiting, and candidiasis have been reported. Nausea, although uncommon, is more often associated with higher oral dosages.

If gastro-intestinal side effects occur with oral therapy they may be reduced by taking AUGMENTIN at the start of meals. Urticarial and erythematous rashes sometimes occur but their incidence has been particularly low in clinical trials. An urticarial rash suggests penicillin hypersensitivity and treatment should be discontinued. Erythematous rashes are frequently mild and transient but may be severe when associated with infectious mononucleosis, in which case treatment should be discontinued. Rare cases of erythema multiforme, Stevens-Johnson syndrome and an occasional case of exfoliative dermatitis have been reported. Serious and occasionally fatal hypersensitivity (anaphylactic) reactions and angioneurotic oedema have been reported in patients on penicillin therapy. Although anaphylaxis is more frequent following parenteral therapy, it has occurred in patients taking oral penicillins. These reactions are more likely to occur in individuals with a history of penicillin hypersensitivity and/or a history of sensitivity to multiple allergens. Hepatitis and cholestatic jaundice have been reported.

AVAILABILITY 375mg AUGMENTIN tablets: White oval film coated tablets engraved "AUGMENTIN" on one side. Each tablet contains 250mg amoxicillin and 125mg clavulanic acid. 625mg AUGMENTIN tablets: White oval film coated tablets engraved "AUGMENTIN" on one side. Each tablet contains 500mg amoxicillin and 125mg clavulanic acid. 156mg AUGMENTIN syrup: Powder for preparing fruit flavoured syrup. When dispensed each 5ml contains 125mg amoxicillin and 31.25mg clavulanic acid. 312mg AUGMENTIN syrup: Powder for preparing fruit flavoured syrup. When dispensed each 5ml contains 250mg amoxicillin and 62.5mg clavulanic acid. In oral presentations amoxicillin is present as the trihydrate and clavulanic acid as the potassium salt. Not all presentations are available in every country.

Further information is available on request to: SmithKline Beecham International, SB House, Great West Road, Brentford, Middlesex TW8 9BD, England.

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Editorial

Dear Readers,

One of the important projects the College has embarked upon recently, and one which has generated much interest amongst our members, is that of designing a computerised medical records database for recording patient contacts.

The College had advertised this interest in the media, and there was a healthy response from many software companies. This necessitated a laborious selection process, which was far from easy. After much hard work, the College will soon be in a position to launch a computerised medical records system which it will recommend to its members. Such a program will offer many advantages, allowing the doctor to record his/her work for future reference, recall patients for timed screening tests or vaccinations, print rather than write prescriptions, certificates and letters to colleagues, and analyse his/her work for audit or research purposes. A standard coding system for diseases, and a drugs database will be incorporated into the program.

However all this work will have been in vain if the software is not used by our members. The main obstacle, besides access to a computer, is that many doctors do not keep medical records. This has many, and serious, implications. When doctors are asked to defend their conclusions in a court of Law, the first thing a lawyer asks to see are the doctor's medical records. Records are essential when writing case reports for colleagues, when looking for symptoms in the past history that sometimes even our patients have forgotten about, when we want to look up patients on our list who suffer from a particular disease so that we can inform them about a new treatment which has just become available, or recall for screening or vaccination. Audit of our practice is impossible without medical records. It is hard to defend the position of doctors who choose not to keep medical records, because there are no good reasons not to.

When the College launches its medical records database in the very near future, I trust that colleagues who have not kept medical records up till now may find a new reason to do so. The standard of our practice may only improve as a result.

Jean Karl Soler

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Cover Photo taken by J.K. Soler:
Il-Qolla, Zebbug.

INTRODUCTION

Epilepsy is the most common of neurological disorders and it imposes a large burden on health care systems. The clinical features, aetiology, severity, prognosis and its association with other neurological disabilities vary greatly, and for this reason, many different disciplines may be responsible for supplying care including neurologists, paediatricians, psychiatrists, and very importantly too, the family doctor.

Epilepsy is most easily defined as the name for occasional sudden, excessive, rapid and local discharges of grey matter. (1) An epileptic seizure can be defined clinically as an intermittent, stereotyped, disturbance of consciousness, behaviour, emotion, motor function, or sensation that on clinical grounds is believed to result from cortical neuronal discharge. Epilepsy can then be defined as a condition in which seizures recur, usually spontaneously. (2) These seizures may be partial or generalised.

The International League Against Epilepsy (ILAE) has proposed two classification schemes, both of which are in current use. An understanding of these classifications is essential for proper management and communication among clinicians. The International Classification of Epileptic Seizures (ICES) in 1981, makes use of clinical and EEG information. (3) Table 1. A second classification was formulated by the ILAE in 1989, as it was recognised that patients may experience similar seizure types within a syndrome with similar age of onset and aetiology. This is termed The International Classification of the Epilepsies and Epileptic Syndromes. (4) Classifying epilepsies into a syndrome where possible may be of vital importance in the management of patients with epilepsy.

EPIDEMIOLOGY

In most studies, the overall incidence of epilepsy (excluding febrile convulsions and single seizures) has been found to be around 70 cases per 100,000 persons per year (with a range of 20-120 per 100,000). The usual prevalence figure given is about 5-10 cases per 1000 persons (excluding febrile convulsions, single seizures and inactive cases). The lifetime prevalence of seizures (the risk of having a non-febrile epileptic seizure at some point in an average lifetime) is between 2 and 5%. The difference between lifetime prevalence and the prevalence of active epilepsy shows that in most patients developing epilepsy, the condition remits. The course of the condition in its early years is an important predictor of its prognosis; the longer the epilepsy remains active the poorer the long-term prognosis. (5) Approximately 70-80% of people with epilepsy have well-controlled seizures on

conventional treatment and are cared for mainly within general practice. The remainder will need continuing access to secondary care. (6)

AETIOLOGY

Epilepsy must be regarded as a symptom complex rather than a disease entity. The causes of epilepsy are many and varied and include the idiopathic and purely genetic disorders, as well as those resulting from any type of acquired cerebral insult. In a recent community based survey of epilepsy in the United Kingdom, 60% of all patients had no identifiable cause of epilepsy, although a proportion of these may have had a specific genetically determined syndrome. The remote symptomatic causes included: vascular disease (15%), tumour (6%), post-traumatic (2%), alcohol related (6%). (7)

DIAGNOSIS

Epilepsy is a clinical diagno-

sis, and there are no tests that can substitute for the clinical history. As the patient is often unaware of what happens during an attack, it is imperative to obtain an account from a first-hand witness as well as details from the patient about events experienced before, during, and after the seizure. In view of the social and economic implications, diagnostic errors need to be avoided. If there is any doubt, the clinician should delay until further evidence is forthcoming to reach a firm diagnosis.

Is it epilepsy? The first step will be to differentiate seizures from other transient symptoms. Table 2. Syncope and pseudoseizures are most often mistaken for epilepsy. Pseudoseizures may account for up to 20% of apparently intractable epilepsies. (8) Accurate diagnosis of non-epileptic seizures is further complicated by the fact that sometimes patients may have both the organic and non-organic seizures.

Table 1. International Classification of Epileptic Seizures

Partial Seizures beginning locally
Simple (consciousness not impaired)
- with motor symptoms
- with somatosensory or special sensory symptoms
- with autonomic symptoms
- with psychic symptoms
Complex (with impairment of consciousness)
- beginning as simple partial seizure and progressing to complex seizure
- impairment of consciousness at onset
a) impairment of consciousness only
b) impairment of consciousness with automatism
Partial seizures becoming secondarily generalised
Generalised seizures
Absence seizures
- Typical
- Atypical
Myoclonic seizures
Clonic seizures
Tonic seizures
Tonic-clonic seizures
Atonic seizures

Table 2. The differential diagnosis of epilepsy

Syncope
Reflex syncope
Postural
Psychogenic
Carotid sinus syncope
Micturition syncope
Valsalva
Cardiac Syncope
Dysrhythmias (heart blocks, tachycardias)
Valvular disease (especially aortic stenosis)
Cardiomyopathies
Shunts
Perfusion failure
Hypovolaemia
Autonomic failure
Psychogenic attacks
Pseudoseizures
Panic attacks
Hyperventilation
Night terrors
Breath holding
Transient Ischaemic Attacks
Migraine
Narcolepsy
Hypoglycaemia
Other Neurological Disorders
Brainstem distortion (Arnold Chiari)
Third Ventricle Tumours

Once it is accepted that seizures have occurred, the next step would be to classify the seizure disorder according to seizure type and aetiology.

First and foremost, acute symptomatic events have to be ruled out, such as alcohol related seizures, a metabolic or toxic encephalopathy, in which case treatment should be primarily directed at the cause and may not necessarily require antiepileptic drug therapy.

Clinical information to be obtained should include a history of perinatal events and milestone development, severe head injury (including prolonged post-traumatic amnesia, depressed skull fractures, and intracerebral haematoma), infections of the CNS. A history of febrile convulsions in infancy has an associa-

tion with hippocampal sclerosis. A family history of seizures may suggest a genetic cause.

Clinical information together with age of onset of seizures, may suffice to allow a presumptive classification of the epilepsy into a specific epileptic syndrome where possible.

For example a history of nocturnal focal motor seizures involving the face or upper limb in a child below the age of 12 may suggest the diagnosis of Benign Childhood Epilepsy with Centro-Temporal Spikes. The development of myoclonic jerking on awakening in an adolescent together with tonic-clonic seizures point to Juvenile Myoclonic Epilepsy. A specific aura indicates a localised onset and therefore a greater likelihood of the epilepsy being symptomatic caused by a

localised cerebral lesion.

Further information at this stage is then to be obtained by investigation, mainly electroencephalography (EEG) and neuroimaging.

THE EEG IN EPILEPSY

The electroencephalogram (EEG) was developed in the late 1920's and has continued to play a major role in the diagnosis and investigation of epilepsies. Scalp EEG represents a summation of excitatory or inhibitory potentials at synapses in the cortex, but deep generators may produce little or no change at the surface.

Routine interictal EEG may provide valuable information that confirms the diagnosis, or helps in the classification of the

type of seizure disorder, or raises the suspicion of a focal underlying structural lesion.

Of patients with epilepsy, 35% consistently have specific epileptiform discharges, 50% do so on some occasion after repeated recording, and 15% never show any discharges. A single routine EEG in the wakeful state will show an epileptiform abnormality in 50% of epileptic patients. Repeated EEG recordings and/or sleep EEG's (sleep deprived or drug induced) increases this figure to about 70-80%. Activating techniques such as hyperventilation and photic stimulation also increases the yield of epileptiform features. In patients with persisting attacks of uncertain cause, prolonged EEG monitoring with video will lead to definite diagnosis in a significant proportion of cases.

Video-telemetry allows the EEG to be recorded for long periods of time, and combined with synchronised video recording of the patient will allow correlation of clinical and electrographic events. As mentioned, one of the main indications for video telemetry is diagnosis, where the nature of the attacks is uncertain. The second main indication is evaluation of the epilepsy with determination of seizure type, quantity of epileptiform activity, documentation of unrecognised attacks, and assessment of pre-surgical cases. Sleep disorders can also be studied by video-telemetry. Sometimes it is necessary to reduce anti-epileptic medication to increase the chances of recording an attack. Patients with pseudoseizures very often will have attacks soon after the recording commences. Intracranial electrode placement is also used in a selected number of patients undergoing pre-surgical assessment.

NEUROIMAGING IN EPILEPSY

In patients with a clear diag-

nosis of epilepsy, neuroimaging is performed in order to identify any underlying structural pathology that would merit specific treatment, particularly if there is evidence of partial onset from the clinical history or from EEG, at any age.

The frequency of abnormalities on computed tomography (CT) scans of patients with epilepsy varies greatly. Tumours may be identified in about 10% of cases. Other abnormalities may include: vascular malformations, post-traumatic lesions, or strokes.

Magnetic resonance imaging (MRI) is becoming increasingly important in epilepsy especially in the assessment of patients whose epilepsy is unresponsive to antiepileptic drug medication. It is superior to CT in the identification of small lesions such as hippocampal sclerosis (with the possibility of volumetric analysis in specialised centres), cavernomas, hamartomas, and dysembryoplastic neuroepithelial tumours. MRI is also superior in identification of abnormalities of the cerebral cortex and other neuronal migration defects, and would be particularly indicated in infants with intractable seizures. MRI is of course essential in the pre-surgical evaluation of patients.

is started, the patient must take regular long-term medication and is exposed to particular psychosocial and economic disadvantages. Therefore it is recommended that treatment is not started until the diagnosis is certain.

The risk of recurrence after a single unprovoked seizure varies from 30 to 70%. With this range of uncertainty current opinion is to withhold medication until a second or a third seizure occurs. Generally there is no harm in delaying treatment provided that the patient is advised to take certain precautions. Meanwhile investigations to determine any possible underlying causative factor should be carried out, and the patient is advised: to stop driving for a period of 12 months, to avoid heights, to avoid swimming alone or in deep waters, and to make use of showers rather than baths.

ANTIEPILEPTIC DRUG TREATMENT

Once the decision has been taken to start antiepileptic drug treatment, it is recommended to start with low doses of one of the first-line drugs appropriate for the particular seizure type. Table 3.

Table 3. First-line Drugs

First-line drug	Indication
Carbamazepine	Partial and Tonic-Clonic Seizures
Sodium Valproate	All seizure types
Phenytoin	Partial and Tonic-Clonic Seizures
Ethosuximide	Absence Seizures

THE SINGLE SEIZURE

It has been estimated that about 5-10% of patients attending epilepsy clinics do not have epilepsy at all. Once treatment

Neither Carbamazepine nor Phenytoin is effective for Absence Seizures or Myoclonic Seizures. (9) These conditions are sometimes worsened by Carbamazepine.

If seizures continue and no side-effects occur, the doses can be increased gradually. If seizures continue despite maximally tolerated doses of first-line drugs, the diagnosis should be reviewed, and it must be ensured that the patient has received the appropriate drug for their seizure type and syndrome. Secondly, drug-compliance must be ascertained. Non-compliance is an important cause of poor seizure control, and the reasons may include poor communication, problems with understanding or remembering of instructions, dissatisfaction with side-effects, or inconvenient regimens.

Once this has been done, an add-on first-line drug can be introduced, and doses increased gradually until seizure control is achieved. If satisfactory control is achieved with the add-on drug, gradual withdrawal of the initial drug may be considered. Usually 70% of patients respond to monotherapy alone.

If a combination of two first-line drugs is unsuccessful, one of the newer or second-line drugs should be considered, and again seizure type should be taken into consideration. These drugs include: Vigabatrin, Lamotrigene, Gabapentin, and Topiramate. Clobazam and Clonazepam are also used as add-on drugs. In the treatment of partial seizures, Vigabatrin and Topiramate show a trend towards better efficacy, while Lamotrigene and Gabapentin show a trend towards better tolerability. (10) Vigabatrin should not be used in the treatment of primary generalised epilepsies. It is the treatment of choice especially in West Syndrome and in symptomatic epilepsies such as that associated with Tuberous Sclerosis. Myoclonus is sometimes worsened by Gabapentin and Lamotrigene, and absence seizures may be worsened by Gabapentin. Lamotrigene may also be used as monotherapy

for partial seizures and generalised tonic-clonic seizures.

If a second-line drug proves to be unhelpful in controlling seizures, it should be gradually withdrawn.

ANTIEPILEPTIC DRUG MONITORING

Serum level monitoring of antiepileptic drugs should be performed with clear indications. The main reasons for carrying out these tests are to detect non-compliance, and to identify dose-related drug toxicity. It is routinely necessary to monitor concentrations only for phenytoin, as this drug undergoes saturable hepatic metabolism, and small changes in doses can result in large changes in serum concentration with loss of efficacy or toxicity. Measurements of carbamazepine and phenobarbitone are necessary in certain clinical situations where dose-related toxicity is suspected on clinical grounds. Drug concentration is a useful guide to optimising doses, but should never be taken as the sole criterion on which to base clinical decisions.

ANTIEPILEPTIC DRUG WITHDRAWAL

With good management, about 70% of patients should achieve long-term remission. In patients who achieve remission for two, three or more years, a potent argument for drug withdrawal may be the many associated adverse reactions. However against this are the dangers of the recurrence of seizures, with important consequences on driving and employment in the adult patient. Advice offered to patients varies widely. In paediatric practice, concern over the drug side-effects on cognitive function and learning abilities, seems to be the more prominent deciding factor in attempting drug withdrawal. With adults, concern over the issue of recur-

rence of seizures with their effect on driving and employment, renders the decision more complicated. The consequences of seizure recurrence may outweigh possible benefit in the patient's opinion. On the other hand most young women contemplating pregnancy with a seizure-free period of more than two or three years, may see this as reason enough for contemplating drug withdrawal.

Few studies have been carried out to determine the success of drug withdrawal. The Medical Research Council Antiepileptic Drug Withdrawal Group studied the relative risk of recurrence on withdrawal of drugs compared to continued treatment. The risk of relapse on continued treatment was 10% per annum, but was two to three times greater in the drug withdrawal group within two years of starting to withdraw treatment. (11) Detailed assessment of the study has proposed seven prognostic factors for increased risk of seizure recurrence: Age 16 years and over, taking more than one antiepileptic drug, history of seizures after starting treatment, history of tonic-clonic seizures (primary or secondarily generalised), a history of myoclonic seizures, an abnormal EEG in the previous year. Risk of seizure recurrence decreases with increasing seizure-free period.

It should be emphasised that the decisions to be made about stopping antiepileptic drugs lie with the patient because social factors such as the possession of a driving license are often of greater importance.

SURGICAL TREATMENT

Surgical treatment of epilepsy was pioneered in the United Kingdom over 100 years ago. However it was never made widely available to patients with epilepsy. With increasing sophistication of neurophysiological

(EEG) investigation, neuro-imaging, and neuropsychology, this form of treatment is becoming successful in a large number of patients. To be considered for epilepsy surgery, patients must have a history of medically refractory epilepsy, and be sufficiently disabled by the frequency of their seizures to warrant the risks associated with the procedure.

The philosophy of surgical treatment is basically of two types.

The first is the accurate identification and excision of a localised site of seizure onset. Temporal lobe surgery for mesiotemporal sclerosis or slow growing glioma in the temporal lobe, is no doubt the procedure that yields best results, with in some centres even a 60-70 % chance of complete control of a previously intractable epilepsy in the ideal candidate.

The second philosophy of surgical treatment is palliative with disconnection of epileptogenic zones and interruption of seizure spread. Callosotomy is performed in uncontrolled secondary generalised seizure disorders. Hemispherectomy may be suitable for patients with intractable epilepsy and an infantile hemiplegia, or the rare Ramussen's focal encephalitis. Multiple sub-pial resections, is also another technique developed by Morrell in 1989, where the principle is to interrupt horizontal connections and therefore spread of epileptogenic activity throughout the cortex, while maintaining vertical connections important for cortical function.

MENSTRUATION, CONTRACEPTION AND PREGNANCY

Many women link the occurrence of their seizures to the perimenstrual period. Changes in hormonal levels, premenstrual tension and fluid retention may

be contributing to this catamenial exacerbation of seizures. There have been various approaches to this treatment, including giving intermittent clobazam, which has been reported to be useful in about 78% of women without developing benzodiazepine tolerance. (12)

Enzyme inducing anti-epileptic drugs, such as Phenytoin, Carbamazepine, Barbiturates, Topiramate and Lamotrigene, increase the metabolism of oestrogen, and therefore reduce the efficacy of oral contraceptive preparations, causing breakthrough bleeding during a cycle. Women who wish to rely on oral contraceptive pills, should have preparations containing at least 50g of oestradiol, or if breakthrough bleeding occurs, up to a maximum dose of 100g of oestrogen.

Women with epilepsy should be offered counseling and advice even if they are not immediately planning a pregnancy. About 90% of women with epilepsy will deliver healthy children. Studies about the effects of epilepsy on pregnancy have varied in their results, from no increased risk to a 1.5-3 fold increase in common obstetric complications, such as toxæmia, pre-eclampsia, bleeding or premature labour. (13) Tonic-clonic seizures can lead to injury of the foetus by virtue of hypoxia, or blunt trauma with resultant abruptio placentae.

The teratogenic potential of anti-epileptic drugs should be put into perspective. The background risk of foetal malformation in developed countries is about 3%. This increases to 7% if one anticonvulsant drug is taken, and to 15% if two drugs are taken. Larger doses are also associated with an increased risk. Sodium Valproate is associated with spina bifida (2% risk compared to 0.01-0.02% risk in the population), cardiovascular and urogenital malformations.

Carbamezepine is associated with spina bifida (1% risk) and hypospadias. Phenytoin and phenobarbitone are associated with cardiovascular malformations (2% risk) and cleft lip or palate (1.8% risk). (14-19) The risks associated with the newer anti-epileptic drugs (vigabatrin, lamotrigene, gabapentin, and topiramate) cannot yet be reliably determined because of the lack of data.

If a woman with epilepsy and taking anti-epileptic medication, presents for pre-pregnancy planning, the following steps should be taken. Therapy should be tailored to have the best protection against seizures with the lowest doses of the least possible number of drugs, preferably with a change to monotherapy if possible. Peak plasma levels of valproate should be avoided by dividing the required daily dose over two or more administrations and use of slow release formulas. All women of child bearing age on anti-epileptic treatment should be prescribed Folic Acid 5mg/day. Folic acid before and during the first 12 weeks of pregnancy helps protect against neural tube defects in the general population. (20) Although no studies have yet been performed to determine this protection in women on anti-epileptic drugs, it is advisable to prescribe the vitamin in particular with valproate and carbamazepine.

Changes of medication during pregnancy should be made on clinical grounds, and monitoring of plasma levels only indicated where there is increase in seizure frequency or concern about compliance or toxicity.

Vitamin K 20mg/day can be administered prophylactically to women on enzyme inducing anticonvulsants during the last month of pregnancy, to help protect the infant against haemorrhage caused by deficiency of vitamin K dependant coagula-

tion factors. In addition intramuscular Vitamin K may be given to the infant.

All the main anti-epileptic drugs pass in small quantities into breast milk. However this is not a contraindication to breast feeding although care should be taken with phenobarbitone and benzodiazepines which may have a sedative effect with withdrawal syndromes on the baby. General advice should be given to mothers with poorly controlled seizures about safe baby care.(21)

DRIVING AND EMPLOYMENT

When a person with epilepsy wishes to obtain a driving license, this could be issued providing all normal requirements are fulfilled and a one-year period free of seizures has passed. When a person already holding a license has a seizure, he cannot drive until the one year fit-free period requirement is fulfilled. From the driving point of view, an aura, partial seizure or myoclonic jerk when due to epilepsy are all significant events. Patients are not exempted from these requirements if seizures have occurred because of non-compliance or change in medication. A patient with a well-established pattern of nocturnal-only seizures observed for at least three years may be granted a temporary license. In order to drive large vehicles or vehicles carrying passengers, a patient must not have a continuing liability to seizures.

The occurrence of seizures at any age is likely to effect employment prospects, and advice should be sought in career guidance for school-leavers and in cases of employment difficulties in adults with active epilepsy. Many factors are likely to effect employment prospects, and it is dangerous to generalise. It would be appropriate to ask what the patient's wishes and ambitions are and assess

the relevance of the epilepsy to this. Assessment should include: employee-related factors, including age, motivation, work experience, seizure-related and drug-related effects, as well as other handicaps. Job-related factors should also be considered including health and safety requirements and availability of special employment provisions. Lastly assessment should also include employer-related factors, such as knowledge and attitude towards epilepsy, the recruitment policies and practices, and access to occupational health services. Patients may choose not to declare their epilepsy to their employer. Two proposals to improve this situation include: using driving license regulations as a standard, and passing on the information to suitably qualified personnel rather than include it on an application form.

STATUS EPILEPTICUS

Status epilepticus is defined as serial seizures without recovery of full consciousness between them. It is a medical emergency and even in modern hospital settings may reach a mortality of 30%. It can be the first manifestation of epilepsy, or complicate chronic epilepsy especially with changes in medication. It can also be precipitated by alcohol, infections, intracranial trauma or tumour. Treatment should be instituted acutely and when resistant, with admission to intensive care, propofol infusion or general anaesthesia with thiopentone.

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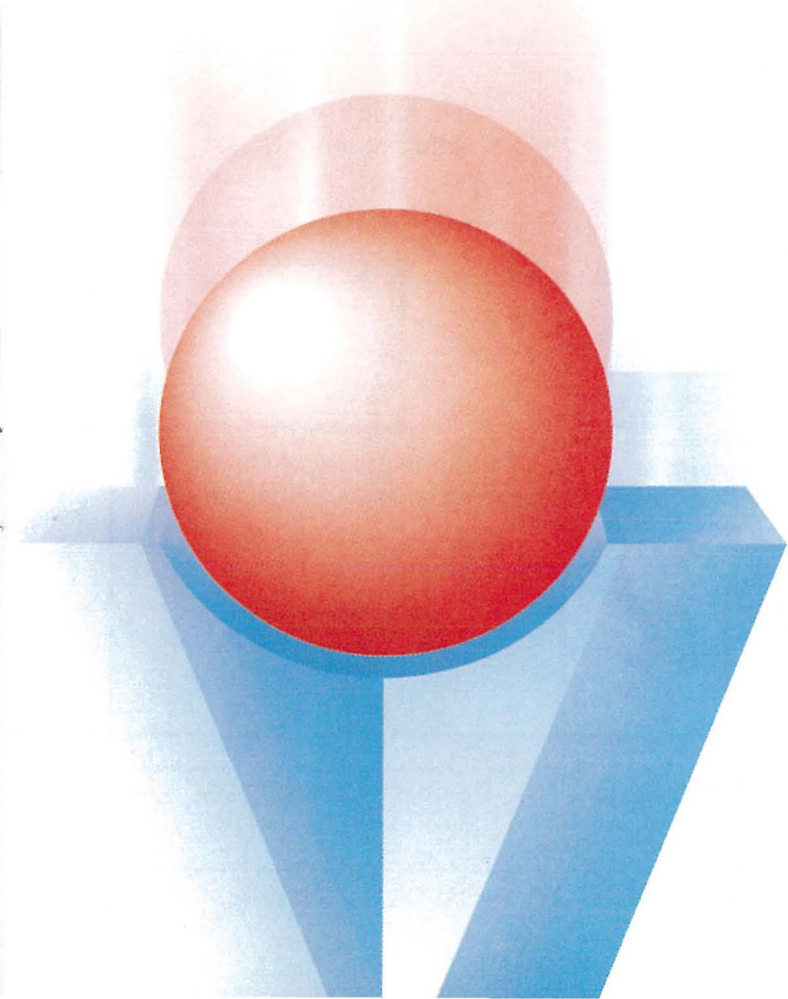
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Anti-Brucellosis Congress
David Bruce & Temi Zammit (1964)



Luigi Preziosi (1988)



50th Anniversary of MMDNA (1995)



Louis Pasteur Commemoration (1995)



Sir Temi Zammit (1994)



Red Cross Centenary (1963)



III Centenary of the School of
Anatomy and Surgery with
anatomical drawing (1976)



50th Anniversary of Dental
Association of Malta (1994)



Malta Red Cross Society (1994)



Cardiac Health (1972)



75th Anniversary Lions
International (1993)



Hypogeum "Sleeping Lady" (1965-70)



III Centenary of the School of
Anatomy and Surgery with
Nicholas Cottner (1976)



70th Anniversary of Malta Girl
Guide Association - First Aid (1993)



Fat Lady (1974)



400th Anniversary of the Collegium
Melitense (1992)



1st European Congress of Catholic
Doctors - nursing (1964)

MALTESE MEDICAL HISTORY AS SEEN THROUGH POSTAGE STAMPS

DR. CHARLES SAVONA-VENTURA

OBSTETRICIAN & GYNAECOLOGIST

Philately often depicts the political and social history of a country by commemorating historical events and honouring distinguished persons who gave some contribution to their community. The local post began using pre-paid postage stamps after 1858 when the use of British stamps on outgoing mail became compulsory. The following year it was decided to reduce the Maltese local postal rate and a distinctive halfpenny stamp for use in the Islands was issued in 1860. Over the last century, Maltese philately has issued a large variety of postage stamps with depictions covering the span of Maltese history from the arrival of primitive man in Malta to contemporary events. Stamp depictions specifically relating to Maltese medical history has generally been a neglected field, though some issues commemorate local/international medical advances or distinguished physicians.

Primitive medicine was inevitably born of instinct. Little is definitely known about the medical practices of primitive man in Malta, but it appears that medical therapy was intertwined with magico-religious practices. Based on the construction of the Hypogeum and the statuatory remains found therein, it was suggested by Sir Temi Zammit that this site served as a sanctuary in which "devotees were able to consult an oracle under the direction of numerous priesthood who among other things practised oneiromancy, that is they interpreted dreams provoked in the faithful that slept in cubicles". This practice was similar to that described in the temple-hospitals dedicated to medicine-god Aesculapius of ancient Greece. The Aesculapian cult developed throughout Greece and reached Rome in 293 BC. For nearly a thousand years the afflicted visited temples erected to the god to be healed by drugs, diet and other modes of treatment. These temples became in time well staffed health resorts, ornate with votive art and treasures donated by grateful devotees. The god's staff entwined by a serpent remains the symbol of medicine. This symbol was depicted on the 1964 series commemorating the European Congress of Catholic Doctors and WHO Commemoration stamp issue of 1988. A number of possible votive offerings depicting pathological conditions have been excavated from Neolithic sanctuaries in Malta. However the most frequent pathological condition depicted in Neolithic sculptures of male and female figures is gross obesity which may reflect a genetic predisposition of the Maltese to obesity and associated metabolic problems. Primitive man in Malta around 800 BC apparently came into regular contact with the Semitic culture of the Phoenicians. This Semitic race, and the Carthaginians after them, believed that the daily hazards of existence were caused by a multitude of malevolent spirits who permeated the universe and intervened in natural processes. These spirits were thus responsible for the onset of disease. Man's only weapon was through the magical powers of amulets - concepts which remained well until the advent of a scientific basis of medicine during the Renaissance. The helplessness of man

before disease and death was poetically described during the 12th century on the tombstone of Maimuna. The Kufic characters record poetry with the following quotation "Look around with your eyes. Is there anything in the world which can stay or repel death, or cast a spell upon it?"(1).

The Roman period furnishes us with the first written document relating to medical disease on the Islands. the Acts of the Apostles records the shipwreck of Paul of Tarsus on Malta along with the evangelist-physician Luke. During their stay in Malta, Luke records a number of miracles of a medical nature performed by Paul. He states that many sick people in the Island came to Paul and were cured. He also records two specific medical disorders. On arrival, Paul was bitten by a snake. The natives reaction to this event showed marked superstition initially believing Paul to be a murderer being punished by the gods. When nothing happened they decided that Paul was a god himself. The expected symptoms of snake-bite are described by Luke. The second specific disease recorded by the evangelist was dysentery with fever. The arrival of Saints Paul and Luke has been commemorated by a number of postage stamps, including a definitive commemorative issue in 1960. A number of stamp issues depict the statue of St. Paul casting the snake into the flames. This wooden statue was sculptured by Melchior Gafa' in 1657. St. Luke, the physician, has given his name to the main hospital on the Islands. The hospital with St. Luke's statue in the foreground is depicted on the 6d stamp of the European Congress of Catholic Doctors series of 1964 (2).

The Modern Period saw the arrival of the Order of St. John of Jerusalem. The order of the Knights Hospitallers of St. John had its origins in Jerusalem in the early years of the first millennium AD, when the Benedictines with the help of some merchants built hospitals to cater for the needs of pilgrims. The nursing functions of the Order is depicted on the 1970 6d stamp of the series commemorating the XIII Art Exhibition of the Council of Europe. The

stamp shows the 18th century painting of Gerald de Martigues - the founder of the Order - administering to the sick painted by Antoine Favray. Increasing harassment by the Turks necessitated changes in the organisation and functions of the Order. Thus to the religious and nursing duties were added the chivalrous ones of defending pilgrims to the Holy Land. The Maltese Islands were ceded to them in 1530 after they were ousted from Rhodes. Their arrival has been commemorated on the Definitive stamp issues of King George VI with the depiction of the Favray painting showing De L'Isle Adam entering Mdina (3). The arrival of the hospitaller knights of St. John of Jerusalem coincided with the onset of the Renaissance movement in Europe. This cultural movement, characterised by the re-awakening of ancient learning through direct knowledge of Greek and Roman authors, was not confined to the arts. It resulted in a new general outlook with emphasis on knowledge of nature and the beginning of Humanism. Observation of phenomena replaced theoretical procedure, science and medicine advanced from the dark into new territories.

The Knights concentrated their forces at Birgu, the maritime centre of Malta. There they established their first hospital. After the Great Siege, the Order commenced the building of a new city named Valletta. Grandmaster Pietro del Monte in 1574 laid the foundations for the new hospital Sacra Infermeria. The hospital continued its function well into the twentieth century. The hospital is depicted on the 1s6 stamp of the European Congress of Catholic Doctors series of 1964 and the 11c stamp commemorating the III centenary of the School of Anatomy and Surgery of 1976. This hospital was in its heyday one of the best serviced hospitals in Europe and was favourably described by a number of foreign visitors to the Island during the seventeenth and eighteenth centuries. The pharmacy of the Infirmary was furnished with many ceramic drug containers of various shapes and sizes. Examples of these, together with a pestle and mortar, are depicted on the 10d stamp of the series commemorating the XIII Art Exhibition of the Council of Europe (4).

In 1675 the plague arrived in Malta killing 11300 persons within six months. When the epidemic ended GrandMaster Nicolas Cottoner decided to augment the medical services on the Island and founded the School of Anatomy and Surgery at the Sacra Infermeria. Nicholas Cottoner is shown tending the sick on the 2d stamp of the 1964 European Congress of Catholic Doctors series, while his memorial erected in the Chapel of Aragon in St. John's Co-Cathedral was depicted on the 2s6 stamp of Queen Elizabeth Definitive series of 1956. His bust is depicted on the 2c stamp commemorating the foundation of the School of Anatomy and Surgery.

The foundation of the School of Anatomy and Surgery, commemorated by a postal series in 1976, saw the start of a scientific foundation of medicine on the Islands. The first teacher of the school was Dr. Fra Giuseppe Zammit depicted on the 7c stamp commemorating the foundation of the school. The School of Anatomy and Surgery in the eighteenth century came to acquire great renown throughout the principal cities of Europe, particularly under the directorship of Michel'Angelo Grima. The School of Anatomy was the prelude to the Faculty of Medicine at the University of Malta. Following the expulsion of the Jesuits from Malta in 1769, the Society's property including their college erected in Valletta for the education of young men in 1592 was taken over by the Order. Out of the revenues accruing from this property, a university was founded by GrandMaster Em. Pinto de Fonseca. The three faculties of Theology, Law and Medicine were established in 1769 and the School of Anatomy was incorporated in the new institution. The four hundred anniversary of the foundation of the Collegium Melitense by the Jesuits was commemorated by a postal series in 1992, while the foundation of the University showing a bust of Pinto was commemorated in the 2s stamp of the Commemorations issue of 1969 (5).

The scientific era heralded by the Renaissance was maintained and strengthened throughout the 19th century after the Islands were taken over by the British. The latter part of the nineteenth and early twentieth centuries saw major advances in medical investigation, including microbiology. Malta also contributed in this advance through the discovery of the organism causing Malta or Undulant Fever and the contribution of the goat to the propagation of the disease. The cause was discovered in 1887 by a young Australian surgeon stationed with the British garrison in Malta. David Bruce, born in Melbourne in 1857, isolated the bacterium from the spleen of a dead soldier. This was named *Brucella melitensis* in his honour and the disease was given the scientific name Brucellosis which it still bears. A fellow Maltese researcher was Temistocles Zammit, who in 1914 proved unmistakably that the *Brucella* organisms were transmitted to humans from the milk of infected goats. This great doctor, archaeologist, historian and social worker was knighted in 1930 and died in 1935. In 1964 the Food and Agricultural Organisation held a Congress in Malta to discuss the control of Brucellosis in the Mediterranean. A commemorative set of two stamps was issued in April 1964. The 2d stamp portrayed Sir David Bruce and Sir Temi Zammit with a microscope, while the 1s6 stamp featured a goat with an array of laboratory instruments. Zammit was also depicted on the 14c stamp of the Europa 1994 series with the theme "Europe and the Discoveries". The work of the two researchers followed on the discoveries of the early scientists, among

whom the most prominent in the field was Louis Pasteur. Pasteur was a French chemist born in 1822 whose researches on the process of fermentation led to the development of bacteriology. He was also responsible for the process known by his name - pasteurisation - which helped control the transmission of brucellosis in milk. The centenary of his death in 1895 was commemorated with a local stamp (6).

Medical problems during the last one and half hundred years have taken place in an international setting, with major medical problems being the result of major war conflicts and epidemic outbreaks. There has further been an international drive to combat premature death in all populations including those in under-developed countries. These efforts have necessitated the setting up of international organisations. In 1863 an agreement was made by the European Powers at Geneva establishing humane regulations regarding the treatment of the sick and wounded in war, and the status of those who minister to them. All persons, hospitals and hospital ships were required to display the Geneva Cross - a red cross or sickle on a white background. An important result of this Geneva Convention was the establishment of the Red Cross Society in 1870. The Centenary of the Geneva Convention was first commemorated by the issue of a stamp commemorative set of two stamps portraying Queen Elizabeth II and featuring the Red Cross emblem. The humanitarian efforts of the members of the Air Raid Precautions during the Second World War in Malta were depicted in the 11/2d stamp issued on the XVII Anniversary of the George Cross Award. This depicts the A.R.P. stretcher-bearers and a group of casualties beside the smoking ruins. The local Malta Red Cross Society was established in 1993, the first anniversary being commemorated by the issue of a stamp in the Commemorations series on 1994 (7).

Other organisations have been set up to address more direct medical matters. In the post-2nd World War period the world was faced with a serious threat of famine. Through the action of John Boyd Orr, an expert on nutrition, came the idea to form the World Food Board to combat this threat. This Board was the precursor of the Food and Agricultural Organisation (F.A.O.) which is the first permanent agency of the United Nations which was established. F.A.O. has organised a number of regional conferences for Europe, some of which have been commemorated on Maltese stamps (8). Another United Nations agency commemorated on Maltese stamps is the World Health Organisation as the 7c5 stamp of the 1973 International Anniversaries and the 19c stamp of the series of 1988 International Commemorations. The United Nations further set up UNICEF initially as a temporary body in 1946, and placed on a more permanent footing in 1953. The United

Nations International Children's Emergency Fund was originally set up to provide emergency assistance to children in war-ravaged Europe. After 1953, its mandate was broadened and now promotes the survival, protection and development of children and their mothers in such fields as health and immunisation, nutrition, education, water and sanitation, and provides relief and rehabilitation assistance in emergencies including vaccines, basic medicines, medical equipment and food supplements. The 50th anniversary of UNICEF was commemorated by the 25c stamp of the 1996 series Child and Youth Welfare (9).

The importance of the social aspect of medical care has also been realised in Malta. Thus a number of local associations have been set up to deal with various aspects of medical care, some of which have been commemorated as postal issues. These include the 75th Anniversary of the Lions International in 1993, the 50th Anniversary of the Dental Association of Malta in 1994, and the 50th Anniversary of the founding of the M.M.D.N.A. in 1995 (10). Other medically related themes and/or congresses commemorated on Maltese postage stamps include the First European Congress of Catholic Doctors in 1964, Cardiac Health in 1972, the International Year for Disabled Persons in 1981, the Care of the Elderly in 1982, and the European Year of the Elderly in 1993 (11).

Only a few medical personalities have been depicted on Maltese stamps (12). A number of these have already been mentioned above.

1. Dr. Fra Guiseppe Zammit: b.1646 d.1740. Appointed first Professor of Anatomy and Surgery in 1676. In spite of his young age he was held in high regard as to his competence as a physician and acted as the personal doctor to at least five GrandMasters. Gregorio Caraffa made him a member of the medical Collegium in 1648 and De Vilhena raised him to Protomedico in 1722.
2. Dr. Giuseppi Barth: b.1745 d.1818. Studied anatomy and surgery under Dr. M.A. Grima in Malta after which he proceeded to Rome and eventually to Vienna where he specialised in eye surgery. Among his patients was Empress Maria Theresa's son, the future Joseph II. He was appointed Professor of Anatomy and Physiology and Professor of Ophthalmology at the Medical School of Vienna University in 1773, and eventually earned the title of Imperial Councillor and Oculist to His Majesty.
3. Dr. John Borg MA MD: b.1873 d.1945. Qualified as a medical doctor in 1898. Became Director of the Experimental Farm of the Agricultural Society in 1898, and Superintendent of Public Gardens and plantations in 1900. Interested in Natu-

ral History, he published a number of botanical works particularly the "Descriptive Flora of the Maltese Islands" (1927). In 1921 he held the Chair of Natural History at the University of Malta.

4. Sir David Bruce: b.1855 d.1931. Qualified as a medical doctor at the Edinburgh University. He joined the Army Medical Corps in 1883 and was sent to Malta. His investigations into the aetiology of Malta Fever led to the discovery of the micro-organisms which caused the disease, now called *Brucella melitensis*. He continued his bacteriological investigations in Uganda proving that the tsetse fly transmitted sleeping sickness. For his work in bacteriology he was made a Fellow of the Royal Society in 1899 and knighted in 1908.
5. Sir Temistoles Zammit: b.1864 d.1935. Graduated in Medicine at the university of Malta in 1882 and later specialised in bacteriology in London and Paris. Appointed Government Analyst in 1890. His main contribution to medicine was the discovery of the importance of the goat in the transmission of the infection Brucellosis. Zammit also gave a very significant contribution to Maltese archaeology. Among the many honours bestowed on him was the conferment of the honorary degree of Doctor of Literature by the Oxford University.
6. Dr. Luigi Preziosi: b.1888 d.1965. Graduated in Medicine in 1910 and subsequently specialised in ophthalmology obtaining a diploma in Ophthalmology from Oxford in 1920. Was appointed Professor of Ophthalmology at the Royal University of Malta in 1924. Preziosi devised an operation to treat Glaucoma, the technique still bearing his name. He also gave an active contribution in Maltese politics.
7. Loius Pasteur: b.1822 d.1895. French chemist whose researches on fermentation led to the science of bacteriology and his investigations into infectious disease and their prevention to the science of immunology. He spent most of his life as administrator and director of scientific studies at the Ecole Normale at Paris, where he was appointed in 1857.

The Stamps issued by any country enables the researcher to trace various aspects of political and social history of the country. Many countries have honoured distinguished medical personalities by depicting them and their deeds on stamps. Some personalities have been honoured by various countries, thus Robert Koch, the microbiologist responsible for the discovery of tuberculosis, appears on postage stamps from Germany, Belgium, Danzig, Romania, Russia

and Sweden. Unfortunately few Maltese medical personalities have attracted the attention of the local postal authorities and a postal set depicting medical personalities is still awaited.

CATALOGUE OF MEDICALLY RELATED STAMPS

1. Prehistoric Medicine:

- [a] The "Oracle Room" at the Hypogeum, Hal Saflieni - possible evidence of dream interpretation: (i) King George VI Definitive issue 1 1/2d stamp: 17 February 1938, 8 March 1943 new colours, 25 November 1948 overprinted "SELF GOVERNMENT 1947", 8 January 1953 new colours (ii) Restoration on Maltese Monuments Campaign - 2c5 stamp: 15 February 1980
- [b] "Sleeping Lady" from the Hypogeum - possible evidence of dream interpretation: Definitive issue 1/2d stamp: 7 January 1965 - 1970
- [c] Aesculapian Symbol of Medicine: (i) 1st European Congress of Catholic Doctors series 3 stamps (2d, 6d, 1s6): 5 September 1964; (ii) Maltese Personalities series 4c stamp: 23 January 1988; (iii) International Commemorations series 19c stamp: 28 May 1988
- [d] "Fat Lady" - gross obesity: (i) Europa series 1c3 stamp: 13 July 1974; (ii) Tezori ta' Malta series 20c stamp: 29 March 1996
- [e] Maimuna tomb-stone. Definitive issue 2 1/2d stamp: 7 January 1965 - 1970

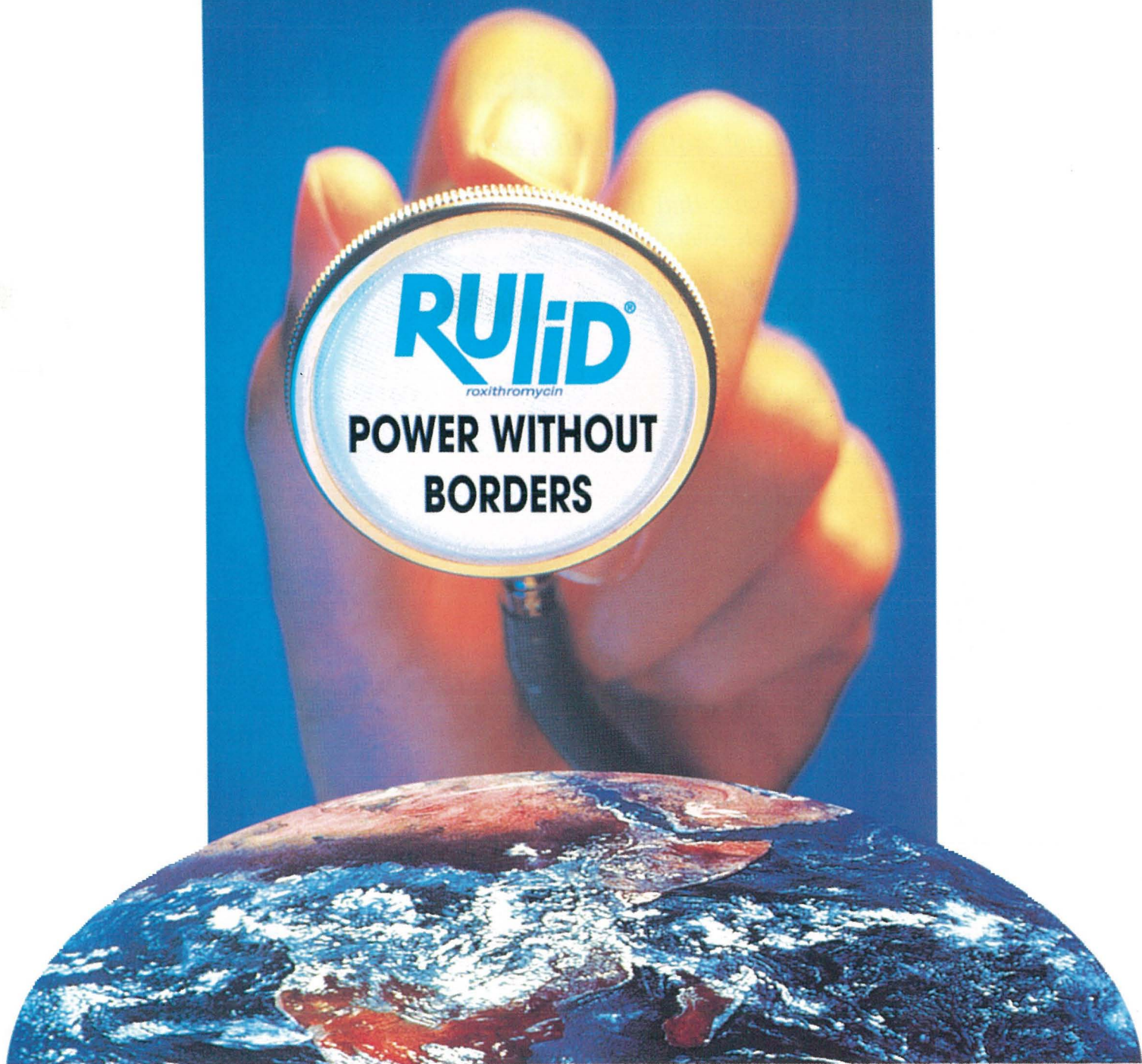
2. Arrival of Apostles Paul and Luke to Malta.

- [a] Arrival of St. Paul: Definitive issue 10s stamp adapted from an engraving by Gustav Dore: 4 February 1898, 1919-20, 1921-22, overprinted "SELF GOVERNMENT" 1922
- [b] XIX Centenary of Shipwreck of St. Paul: Commemorative issue 6 stamps (1 1/2d, 3d, 6d, 8d, 1s, 2s6): 9 February 1960
- [c] Apostle Paul throwing snake in fire: (i) King George V Definitive issue 10s stamp: 1926-27 inscribed "POSTAGE", 1 October 1928 overprinted "POSTAGE & REVENUE", 20 October 1930 inscribed "POSTAGE & REVENUE" (ii) King George VI Definitive issue 10s stamp: 17 February 1938, new colours 8 March 1943, 25 November 1948 overprinted "SELF GOVERNMENT 1947", new colours 8 January 1953 (iii) Queen Elizabeth II Definitive issue 10s stamp: 23 January 1956;
- [d] St. Luke's Hospital, Malta: First European Congress of Catholic Doctors series 6d stamp: 5 September 1964

3. Hospitaller Order of St. John:

- [a] The "Blessed Gerald" administering to the sick: XIII Art Exhibition of the Council of Europe series 6d stamp: 21 March 1970
- [b] De L'Isle Adam entering Mdina: King George VI Definitive issue 2 1/2d stamp: 17 February 1938, 8 March 1943 new colours, 25 November 1948

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It is not necessary to modify the dosage regimen. Children : The dosage regimen to be used is 5 to 8 mg/kg/day in two divided doses and treatment must not be pro-

longed beyond ten (10) days. Tablet forms must not be used in children below four (4) years of age. 12 to 23 kg : 50 mg twice daily 24 to 40 kg : 100 mg twice daily above 40 kg : 150 mg twice daily. Contra-indications : Hypersensitivity to macrolides. Concomitant therapy with vasoconstrictive ergotamine-type compounds. Adverse reactions : Gastrointestinal : nausea, vomiting, abdominal pain, diarrhoea; in isolated cases, symptoms of pancreatitis. Hypersensitivity reactions, mainly mucocutaneous (rash, urticaria, angioedema), exceptionally systemic (bronchospasm, anaphylaxis). Dizzy sensations. Liver function tests abnormalities : rarely cholestatic or acute hepatocellular liver injury. Disturbances of taste and/or smell. Possibility of fungal overgrowth. Special warnings and special precautions for use : in severe hepatic insufficiency, the dose should be reduced by half (1 tablet 150 mg daily). Pregnancy : roxithromycin crosses the placental barrier; the safety of the foetus has not been established. Lactation : roxithromycin is minimally excreted in human breast milk. Abnormalities of the growth plate have been observed in young animals at unbound plasma concentrations 30 to 60 times higher than those observed in clinical use. No abnormalities were observed at unbound plasma concentrations 10 to 15 times higher than those observed in clinical use. It is therefore recommended that the dose level of 5 to 8 mg/kg/day be adhered to for no longer than ten days (for paediatric forms of roxithromycin only). Drug interactions : There is no clinically significant interaction with carbamazepine, ranitidine, aluminium or magnesium hydroxide, oral contraceptives containing oestrogens and progestogens. In healthy volunteers, a slight increase has been detected in plasma concentrations of theophylline or ciclosporine A levels but this does not necessitate alteration of the usual dosage. An in-vitro study has shown that roxithromycin can displace protein-bound disopyramide ; such an affect in vivo may result in increased serum levels of free disopyramide. Like other macrolides, roxithromycin may increase the absorption of digoxin. The effects of midazolam may be enhanced and prolonged in patients treated with roxithromycin, as with other macrolides antibiotics. Certain macrolide antibiotics are capable of a pharmacokinetic interaction with terfenadine, leading to increased serum levels of terfenadine. This may result in severe ventricular arrhythmias. Caution should be exercised if roxithromycin is co-prescribed with terfenadine. List 1 : Full prescribing information available on request.

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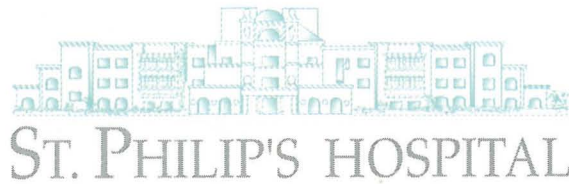
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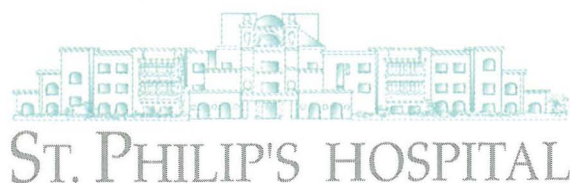
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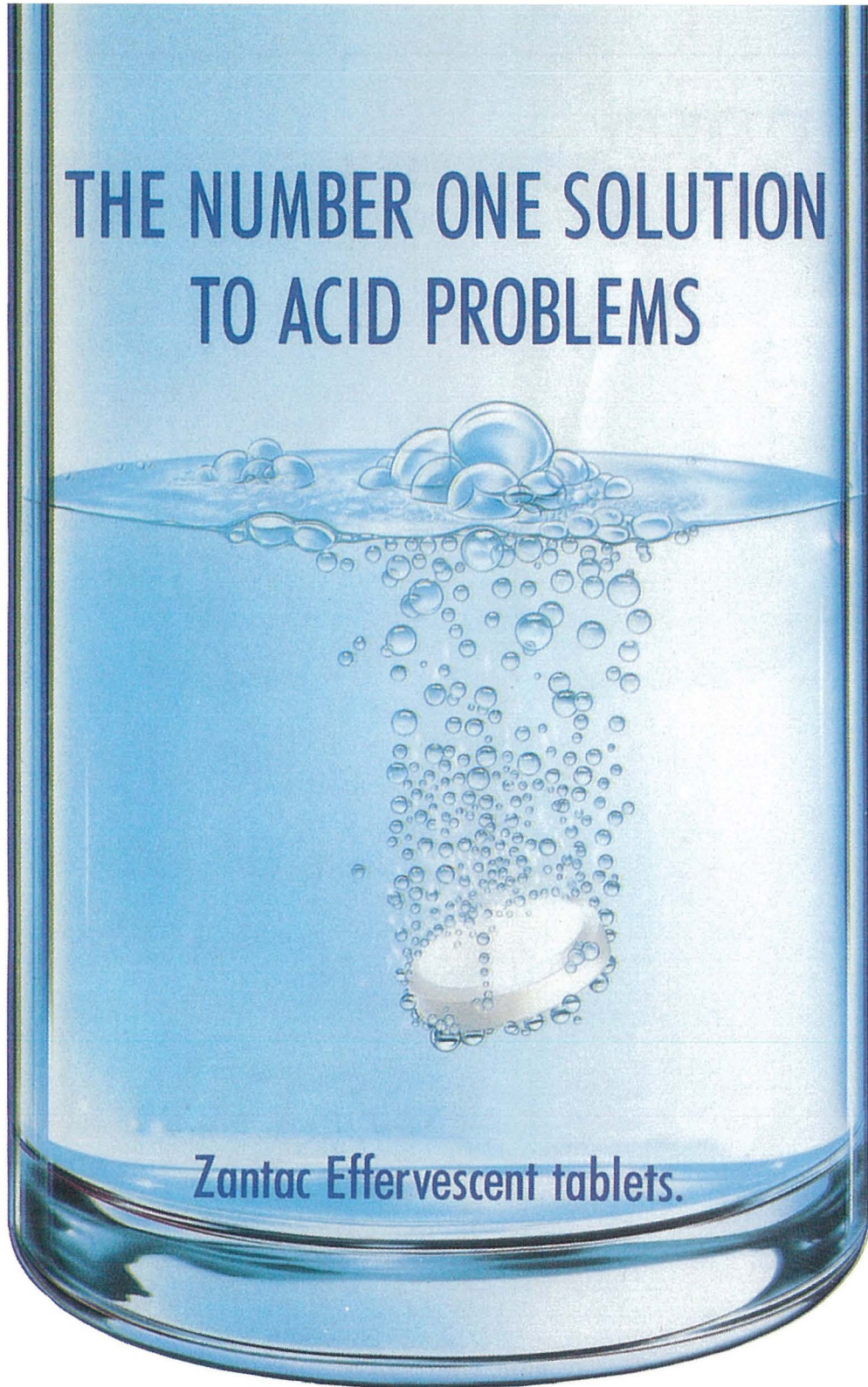
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4. Hospitals of the Order of St. John:

- [a] Sacra Infermeria at Valletta: (i) First European Congress of Catholic Doctors series 1s6 stamp: 5 September 1964 (ii) III Centenary of the School of Anatomy and Surgery series 11c stamp: 14 September 1976
- [b] Pharmacy Jugs/equipment: XIII Art Exhibition of the Council of Europe series 10d stamp: 21 March 1970

5. Setting up of Medical Studies:

- [a] Nicholas Cottoner - founder of Chair of Anatomy and Surgery: (i) Queen Elizabeth II Definitive issue series 2s6 stamp: 23 January 1956 (ii) First European Congress of Catholic Doctors series 2d stamp: 5 September 1964 (iii) III Centenary of the School of Anatomy and Surgery series 2c stamp: 14 September 1976
- [b] Setting up of School of Anatomy and Surgery: III Centenary of the School of Anatomy and Surgery Commemorative issue 4 stamps (2c, 5c, 7c, 11c): 14 September 1976
- [c] Setting up of University of Malta: (i) 400th Anniversary of the "Collegium Melitense" 2 stamps (4c, 30c): 12 November 1992 (ii) 200th Anniversary of the University of Malta: Malta Commemorations series 2s stamp: 26 July 1969

6. Brucella melitensis:

- [a] Anti-Brucellosis Congress - David Bruce and Temi Zammit: Commemorative issue 2 stamps (2d, 1s6): 14 April 1964
- [b] Sir Temistoles Zammit: Europa 1994 - Europe and the Discoveries series 14c stamp: 29 March 1994
- [c] Death of Louis Pasteur: Commemorative series 25c stamp: 20 February 1995

7. Geneva Red Cross:

- [a] Red Cross Centenary: Commemorative issue 2 stamps (2d, 1s6): 2 September 1963; International Commemorations series 4c stamp: 28 May 1988
- [b] A.R.P. during the 2nd World War: XVIII Anniversary of George Cross Award series 11/2d stamp: 15 April 1959
- [c] Malta Red Cross Society - International recognition: Commemorative 1994 series 9c stamp: 10 May 1994

8. Nutritional themes:

- [a] Freedom from Hunger: 1 stamp (1s6): 4 June 1963
- [b] FAO Anti-Brucellosis Congress: 2 stamps (2d, 1s6): 14 April 1964
- [c] VI FAO Regional Conference for Europe: stamps (4d, 1s, 2s6): 21 October 1968
- [d] 10th Anniversary of World Food Programme:

International Anniversaries series 1c3 stamp: 6 October 1973

- [e] World Food Day: 2 stamps (8c, 23c): 16 October 1981
- [f] 50th Anniversary of setting up of FAO: Anniversaries 1995 series 35c stamp: 21 April 1995

9. International Associations:

- [a] W.H.O.: (i) International Anniversaries series 7c5 stamp: 6 October 1973; (ii) International Commemorations series 19c stamp: 28 May 1988
- [b] U.N.I.C.E.F.: 50th Anniversary - Child and Youth Welfare series 25c stamp: 29 February 1996

10. Local Associations:

- [a] 75th Anniversary Lions International: 2 stamps (4c, 50c): 4 February 1993
- [b] 50th Anniversary of Dental Association of Malta: 2 stamps (5c, 44c): 12 February 1994
- [c] 50th Anniversary MMDNA founding: Commemorations 1995 series 20c stamp: 27 February 1995

11. Other Medical Themes:

- [a] First European Congress of Catholic Doctors: 3 stamps (2d, 6d, 1s6): 5 September 1964
- [b] Cardiac Health: 3 stamps (2d, 10d, 2s6): 20 March 1972
- [c] International Year for disabled persons: 2 stamps (3c, 35c): 17 July 1981
- [d] Care of the Elderly: 2 stamps (8c, 30c): 16 March 1982
- [e] European Year of the Elderly: 2 stamps (5c, 35c): 23 September 1993

12. Medical Personalities:

- [a] Giuseppe Zammit: III Centenary of the School of Anatomy and Surgery series 7c stamp: 14 September 1976
- [b] Giuseppe Barth: Prominent Maltese series 3c stamp: 12 January 1974
- [c] John Borg: Prominent Maltese series 7c5 stamp: 12 January 1974
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MANAGEMENT OF NECK LUMPS

DR. ADRIAN M. AGIUS

ENT SURGEON

The purpose of this communication is to call to the attention of the medical profession in general not only to the needlessness but also to the possible harmfulness of excisional lymph node biopsy as the first or even as an early step in the diagnosis of cancer.

Hayes Martin, 1961

The commonest neck lumps seen in a general surgical practice are thyroid lumps and benign lymph node enlargement. The focus of this article is on asymmetric lymph node masses in the neck and the **key concepts I would like to convey are the importance of the ENT examination and Fine Needle Aspiration Cytology or FNAC.** The above quotation applies not only to the management of cancer but also to that of the commoner benign neck lumps. The knee-jerk reaction of indiscriminate biopsy under GA for these clinical conditions should be considered as outdated, and abroad, has been relegated to the pages of surgical history.

By and large, such neck lumps in children are related to chronic sepsis. Certainly, the commonest cause of persistent lymph node enlargement in children is jugulodigastric lymphadenopathy in relation to chronic or recurrent tonsillitis. In the teenage and adult population other infective causes include infective mononucleosis (glandular fever), brucellosis, toxoplasmosis, cat scratch disease and cytomegalovirus infection. Branchial cysts are transilluminable and present just anterior to the sternocleidomastoid muscle at the junction of its upper third with its lower two thirds. Salivary gland lumps, such as submandibular or parotid lumps may be related to calculi, inflammatory or autoimmune disease or neoplasms. Lymphomas frequently present in the head and neck region, in the postnasal space, tonsil or salivary tis-

sue. Firm, rubbery nodes in the posterior triangle of the neck should arouse suspicion, especially in association with a history of weight loss, night sweats or fever.

HISTORY

In the elderly patient with an asymmetric enlargement of a cervical lymph node it is relevant to ask how long the lump has been there, whether it is enlarging and whether there are any associated general symptoms (such as fever, night sweats or weight loss). Head and neck cancer is associated with smoking and alcohol misuse. Malignant neck lumps are generally secondaries from a primary in the ENT region such as the tonsil, piriform fossa, postnasal space (PNS) and sinuses. Specific symptoms such as pain on swallowing or otalgia (tonsil, piriform fossa), dysphagia (hypopharyngeal), hoarseness (laryngeal), conductive hearing loss due to middle ear effusion (postnasal space) is relevant. Thyroid tumours may also present in this fashion. Cough and haemoptysis and recently noted breast lumps may be relevant, as primary sites of malignancy outside the ENT region include the lung, breast, gastrointestinal tract and even prostate.

PHYSICAL EXAMINATION

The ENT examination in a patient with a malignant neck lump immediately reveals the primary site in a third of cases. Nowadays examination of the

PNS is simple and quick using a flexible fiberoptic nasoendoscope without the need for general anaesthesia. A systemic examination e.g. axillae, groin, chest, breasts, abdomen, prostate would also be useful. In patients where the primary is not immediately obvious further investigations are required.

INVESTIGATION

By far the most important investigation is **Fine Needle Aspiration Cytology (FNAC)** using a 22-gauge needle. This gives an accurate diagnosis (sensitivity and specificity in most centres well in excess of 90%) but with an experienced Head and Neck cytopathologist to interpret the slides. It is quick, giving a result within 24 hours and extremely safe—there have been no reports of cell seeding or tumour spillage. FNAC is useful in the management of benign lumps as well. In an elderly patient where FNAC shows a pleomorphic adenoma of the parotid, one may opt to wait and observe, for instance. The same may be said for solitary lymph node swellings where ENT examination is negative and the FNAC shows reactive lymphocytosis. Final decision whether to biopsy depends on clinical suspicion but FNAC and follow-up are a satisfactory alternative to operation.

If the FNAC is positive for carcinoma one should then proceed to panendoscopy of the upper aerodigestive tract, including blind biopsy of PNS, ipsilateral tonsil and piriform fossa.

A second primary tumour is present in 10% of Head and Neck malignancies, which is another reason for endoscopy. Endoscopy reveals the site of the primary in another third of patients presenting with a malignant neck lump. Other investigations of relevance include a CBC, differential and picture, ESR and CXR.

BIOPSY

The main problem with biopsy is related to eventual tumour fungation through skin at the site of incision. This will compromise future definitive surgery because skin adjacent to this area will have to be resected and will limit the way in which skin flaps may be designed. A discrete salivary mass should not be subjected to incisional biopsy (unless inside the oral cav-

ity) because this invites recurrence; salivary masses should be removed completely, preferably with a cuff of surrounding tissue. Salivary gland tumour diversity requires expert evaluation. In cases of clinical doubt one has to proceed to biopsy, e.g. young children with rapidly growing masses and especially, if no primary has been found on panendoscopy. In the remaining third of patients with a malignant neck lump (so-called occult primary) diagnosis requires more time and further investigation, as the primary is not readily identifiable.

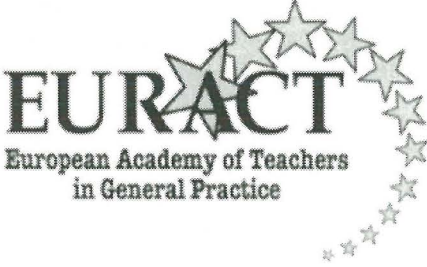
CONCLUSION

There is no substitute for proper clinical history taking and physical examination. The progress of cytological methods

has presented us with a tool, which as yet seems to be underused in our islands. ENT examination, FNAC with expert cytological interpretation is a must in our ability to manage neck lumps in a way that offers both cost and morbidity benefits to our patients.

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7th INTERNATIONAL WORKSHOP

LEARNING AND TEACHING ABOUT DRUG PRESCRIBING IN GENERAL PRACTICE

Bled, Slovenija:
September 8-12, 1998

Slovenian medical association
Section for general practice

Medical Faculty Ljubljana

Institute of public health
of the Republic of Slovenia

OBJECTIVES OF THE COURSE: At the end of the course the participants should

- understand the principles and importance of drug prescribing in general practice
- know about different strategies in achieving adequate prescribing in general practice
- be able to evaluate prescribing decision and prescribing patterns in a practical situation
- be able to teach about prescribing in general practice setting

DIABETES HEALTH CARE - TARGETS & ESSENTIALS FOR TREATMENT

DR. ANTOINE G. SCHRANZ

DHBETOLOGIST

INTRODUCTION

The following is a short write-up, highlighting within the permitted space some salient points related to the topic that could prove of relevance in the clinical management of both types of diabetes.

Type 1 diabetes.

This condition is predominantly, but not only, found in younger patients. It is typically characterized by a progressively developing destruction of the pancreatic beta cells with resultant insulin deficiency. Dependency on insulin only occurs after the great majority of these cells are lost - when the clinical onset is sudden with marked symptoms and signs. The disorder is subdivided into immune mediated and idiopathic forms, the former being much commoner and at times accompanied by similar involvement of other systems. Although overshadowed by the far more frequent type 2 diabetes, type 1 diabetes is by no means rare. Evidence suggests that in the last decade the incidence in Malta may be increasing, especially in the younger age groups (see Table 1).

Table 1. Mean yearly incidence of Type 1 diabetes in Malta.

Period	0 - 4 years	5 - 9 years	10 - 14 years	0 - 14 years
1980 - 1989	2.0	4.0	5.2	11.2
1990 - 1997	3.3	5.0	5.7	14.0

The basic treatment of this type of diabetes consists essentially in the judicious use of insulin ('human' being preferable because of its lower antigenicity) and a well balanced meal plan (made up of 3 meals and 3 snacks in between). These must be supplemented by exercise, appropriate education, blood glucose self monitoring and psychological counselling. Targets of care should have practical guidelines and realistic standards, involve both the patient and his/her relatives and emphasize the crucial role of the health care team. The aim should be for near-normal glycaemia without undue risks of severe hypoglycaemic episodes. This is usually achieved by means of 2-3 daily short-acting insulin injections with 1-2 intermediate-acting ones, and complimented by nutrition adapted to individual needs and family habits and balanced for optimal health.

The initial treatment of newly diagnosed cases calls for hospitalization if the condition is severe (threatening ketoacidosis), or the referral to a specialist if milder. The follow-up management, once the situation is stabilized, involve medical and paramedical staff as well as the relatives of the patient. Evaluation of control should include the assessment of growth, development and social performance (including at school), regular self

blood glucose monitoring and GHb/HbA1c estimations together with periodic testing for complications (fundoscopy, urinary albumin excretion, neurological exam, blood pressure reading, lipid profiles, thyroid function tests etc).

It must be pointed out that type 1 diabetes often causes a significant impact on the life of both the young patient and his/her immediate environment which can seriously condition the success of treatment - hence the dire need of education and support. Relatives often find difficulty coming to terms with the situation and worry about the future. Friends, teachers etc are unprepared on how to tackle such cases. All this could lead to further insecurity, isolation and frustration in the child. Moreover during development the child passes through stages (school, adolescence..) that require careful attention because of their different but strong potential for disrupting normal relationships between the patient and his/her home, siblings and peers. Therefore the health care team should try to involve all those resources that can provide the necessary aid to the diabetic child and the family.

Type 2 diabetes.

This is common here, and frequently asymptomatic in the early stages. The prevalence increases markedly with age, obesity and positive family history. It is a major health problem due to its complications and concomitant disease both of which are made worse by improper life style habits.

The basics of treatment consist of a proper diet, daily exercise, body weight control and oral hypoglycaemic agents when indicated. These could be used singly or in combination (eg sulphonylurea + biguanide) supplemented if needed by alpha glucosidase inhibitors. Insulin is eventually often needed either in low doses with oral hypo glycaemic agents or on its own. [Type 1 diabetes in adults is more common than formerly believed. This so-called latent auto-immune diabetes of adults (LADA) has its onset after 35 years and initially masquerades as type 2 diabetes but becomes insulin requiring within a few years-evidenced by decreased C-peptide secretion and positive islet cell and anti-GAD antibodies]. Physical exam, biochemical tests (inc.HbA1c), education and blood glucose self monitoring are also requisites of proper management.



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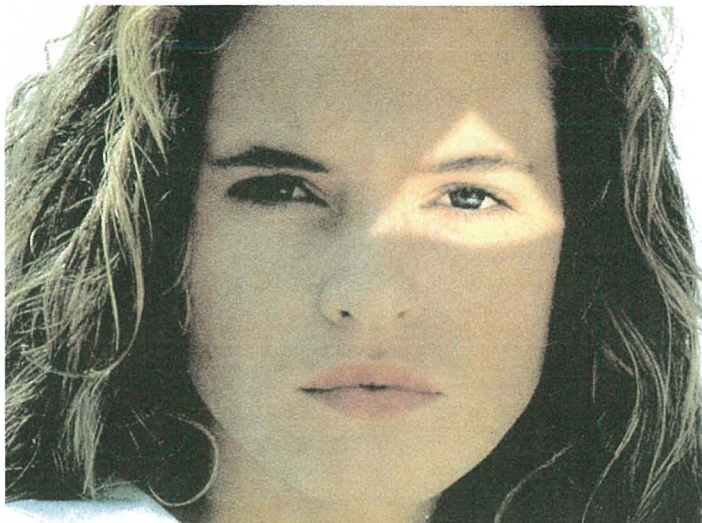
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Complications are common and often present at time of diagnosis of diabetes. They need detecting and treating. Amputations and blindness can be reduced by education (eg foot care), tests (eg. funduscopy), good glycaemic control and timely intervention.

Together with the need of screening for complications there is the strong indication in adult diabetic subjects to look for, diagnose early and treat aggressively concomitant disease especially those that form part of the so called metabolic syndrome X. This condition is associated with heart disease - the major cause of morbidity and mortality in Maltese diabetic patients- and consists of insulin resistance with hyperinsulinaemia, accompanied by obesity (esp. the android central type), abnormal glucose tolerance, dyslipidaemia (esp raised triglycerides and low HDL-cholesterol levels) and high blood pressure. Other known cardiovascular risk factors include increased total cholesterol levels, smoking, personal or family history of early heart disease, lack of exercise and raised serum fibrinogen levels. A recent study in local middle-aged diabetics revealed high rates of most of these risk markers with important gender differences (see Tables 2 and 3). Indeed only 11% of these patients were still free of other risk factors whilst more than 1/3 had 3 or more risk factors over and above their diabetes. This clearly highlights the importance of focusing on these factors as much as on blood glucose control in the management of type 2 diabetes.

Table 2. Prevalence (%) of Syn. X components in adult Maltese diabetics

factors	males	females	total
obesity ↑BMI	23	46	34
↑W/H ratio	29	47	38
triglycerides >2.2	11	11	11
HDL-cholesterol <0.9	34	18	26
current BP >160/95	12	20	16

present ↑BP made up of 1/4 of known cases + 1/9 of unknown cases
PH of ↑BP = 38%; of which 1/2 were on diuretics &/or β blockers

Table 3. Prevalence (%) of other C.V. risk factors in adult Maltese diabetics

factor	males	females	total
total chol > 6.7	15	28	22
TC/HDL-C >5.5	51	47	50
smoking	29	13	21
IHD personal	31	23	27
FH < age 65	31	33	32
Fibrinogen >400	25	33	29
lack of exercise	51	21	36

Hyperlipidaemic pts: only 17% on therapy, of which 1/3 still TC ↑, & 1/6 still TG ↑

The degree of attention needed to pay both to glycaemia and co-existing pathology is clearly outlined in international guidelines for control in diabetes - a summary of which is shown in Table 4.

In practice this means that the initial evaluation of a newly diagnosed type 2 diabetic patient needs a complete medical history, a full physical exam (inc. eyes, feet, nerves) and a biochemical assessment particularly blood glucose, GHb estimation,

Table 4. Targets for control in diabetes

	Good	Poor
Glycaemia fasting mmol/l	4.4 - 6.1	>7.8
random mmol/l	4.5 - 8.0	>10.0
HbA1c %	<6.5	>7.5
Total cholesterol mmol/l	<5.2	>6.5
HDL-cholesterol men/women	>1.1 / >1.4	<0.9 / <1.2
Triglycerides mmol/l	<1.7	>2.2
B.M.I. kg/m ² men/women	20-25 / 19-24	>27 / >26
Blood pressure mmHg	≤ 140/90	>160/95

No smoking
Regular exercise

lipid profile, renal function tests, and urinary albumin excretion. Advice about diet, and education on diabetes, blood glucose self monitoring and healthy life style are also to be started.

At follow-up body weight, glycaemic and GHb levels have to be checked, education assessed, and repeat of previously abnormal biochemical tests done. A search for early co-morbidity especially in high risk cases should be done. Periodic repeat physical exams and re-evaluation of therapy and the teaching programme are indicated too.

Conclusion.

Type 1 diabetes needs appropriate insulin treatment together with a balanced meal plan, education of the patient and relatives, blood glucose self monitoring, HbA1c tests and psychological support. This requires the combined efforts of various specialized staff to sustain near normoglycaemia and promote growth and development. Management should also involve regular checks for and proper treatment of related complications.

Type 2 diabetes management includes diet, exercise, body weight control, oral hypoglycaemic agents and/or insulin to keep glycaemic levels close to normal for the patient's age and condition. It must be admitted however that satisfactory treatment for many of these cases remains problematic. Early detection and aggressive treatment of incipient complications and concomitants (particularly cardiovascular risk factors) are management essentials too. Continuous education of the patient and the public is also important, as is the screening of high risk subjects, including the obese, IGT cases and females with past gestational diabetes.

FIRST ANNOUNCEMENT



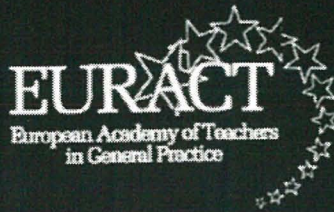
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INTRODUCTION

Western scientists only began to take acupuncture seriously in 1972 after visits to China increased in frequency. In recent years in the west, acupuncture analgesia (AA) has been restricted mainly to the treatment of acute and chronic pain. However, even for the treatment of pain, many western physicians were sceptical at first, despite a vast body of anecdotal evidence from both China and Europe.

How could a needle in the hand possibly relieve a toothache? Because such phenomena did not fit into the existing knowledge of physiology, scientists were puzzled and sceptical. Many explained it by the well known placebo effect which works through suggestion, distraction or even hypnosis. However, there were several problems with this idea. How does one explain its use in veterinary medicine over the past 1000 years in China and approximately 100 years in Europe and its growing use in America? Similarly children also respond to AA.

In the past 13 years, scientists have been asking two important questions

1. Does AA really work (that is by a physiological rather than a placebo / psychological effect)?
2. If it does work, what is the mechanism?

The first question had to be approached by way of controlled experiments to factor out placebo effects, spontaneous remissions etc. These have been carried out in clinical practice on patients with chronic pain, in the laboratory on humans, studying acute laboratory induced pain and in animals. From numerous studies it can be concluded that AA works much better than placebo.

Hence, AA must have some physiological basis. But what are the possible mechanisms? Only the answer to the second question (how does AA work) could possibly dispel the deep scepticism toward acupuncture.

Neural Mechanisms of Acupuncture Analgesia

Ten years of research coupled with over a hundred papers from the western scientific literature have led to a compelling hypothesis. Figures 1 to 3 summarize various aspects of the hypothesis of the neural mechanism of AA. Figure 1 shows how pain messages are transmitted from the skin to the cerebral cortex.

On the left is skin with a muscle beneath it in the lower left corner. An acupuncture needle penetrates the muscle. The next rectangle is spinal cord, and to the right are rectangles depicting various brain structures: midbrain, thalamus, pituitary- hypothalamus and cerebral cortex.

An injury to the skin activates the sensory receptors of small afferent nerve fibres (labelled 1) of A delta and C axon size. Cell 1 synapses onto the STT (spinothalamic tract) cell in the spinal cord (labelled 2). The STT (cell 2) projects its axon to the thalamus to synapse onto cell 3, which sends impulses to the cortex to activate cell 4 (probably in the primary somatosensory cortex). This diagram is OVERSIMPLIFIED, since there are at least six possible pathways carrying painful messages from the spinal cord to the cortex, but for the sake of clarity only the STT is shown.

In figure 2 the acupuncture needle activates a sensory receptor inside the muscle, and this sends impulses to the spinal cord via the cell labelled 5, which represents type II and III muscle afferent nerves (small myelinated afferents). Cell number 5 synapses in the spinal cord onto an ALT (anterolateral tract) cell (labelled 6) which projects to one of three centres ; to the spinal cord, to the mid brain, and to the pituitary- hypothalamic complex. Within the spinal cord, cell 6 sends a short segmental branch to cell 7, which is an endorphinergic cell. This cell releases either enkephalin or dynorphin. There are three families of endorphins : enkephalin, beta endorphin and dynorphin and these are labelled E in Fig. 2. The spinal cord endorphins cause presynaptic inhibition of cell 1 (preventing transmission of the painful message from 1 to 2). There are also postsynaptic endorphin synapses acting directly onto cell 2 from cell 7, though these are not shown. The presynaptic inhibition probably works by reducing calcium current flow during the action potential in the terminals of cell 1, resulting in reduced release of the pain transmitter which has been suggested to be glutamate, substance P and ATP. There are numerous peptides present in the terminals of cell 1. So far only cholecystokinin (CCK) has been shown to play a role in AA, acting like naloxone, the opiate antagonist, to block endorphin-mediated AA (perhaps the ratio of CCK and endorphins is the important variable in producing analgesia). Cell 6 projects to the mid brain, ascending the spinal cord in the ALT. Here it excites cells in the periaqueductal grey (PAG; cells 8 and 9), which releases enkephalin to disinhibit cell 10 (which is thus excited) and in turn activates the

raphe nucleus causing it to send impulses down the DLT to release monoamines (serotonin and norepinephrine; labelled M) onto the spinal cord cells. Cell 2 is inhibited by postsynaptic inhibition, while cell 1 is presynaptically inhibited via cell 7 (cell 7 is excited while cell 2 is inhibited by the monoamines). Either of the two monoamine mechanisms can suppress the pain transmission. Some believe that serotonin and peptide neurotensin may be the excitatory transmitter between cells 10 and 11. More work is needed on the role of the monoamine system in AA.

Less well understood is the action of cell 6 onto cells 12 and 13 (the pituitary hypothalamic complex), where cell 12 in the arcuate nucleus may activate the raphe via beta endorphin and cell 13 in the hypothalamus may release beta endorphin from the pituitary gland. While there is some agreement that AA is accompanied by elevated beta endorphin in the CSF (and blood) and that pituitary lesions suppress AA, there is no agreement on how the beta endorphin from the pituitary reaches the brain to cause analgesia. Too little reaches the blood to cross the blood-brain barrier in sufficient quantities to produce analgesia. Some evidence suggests that the pituitary-portal venous system can carry hormones in retrograde direction directly to the brain. Perhaps cell 14 can influence cell 9 as shown by the thin arrow, without having to cross the blood-brain barrier. If so, the role of circulating endorphins in the blood is unclear. However there is an important correlate of pituitary beta endorphin release: ACTH and beta endorphin are both coreleased on an equimolar basis into the circulation (they are both made from a common precursor). The ACTH travels to the adrenal cortex, where cortisol is released into the blood, which may explain why acupuncture is helpful in blocking the inflammation of arthritis and the bronchospasms of asthma (the doses of cortisol released by acupuncture are small and finely regulated, thus avoiding the side effects of cortisol drug therapy).

In summary, acupuncture activates nerve fibres in the muscle, which send impulses to the spinal cord and activate three centres (spinal cord, midbrain, and hypothalamus-pituitary) to cause analgesia. The *spinal* site uses enkephalin and dynorphin to block incoming messages with stimulation at low frequency, and other transmitters (perhaps GABA) with high frequency stimulation. The *midbrain* uses enkephalin to activate the raphe descending system, which inhibits spinal cord pain transmission by a synergistic effect of the monoamines, serotonin and norepinephrine. Finally, at the third centre, the *hypothalamus-pituitary*, the pituitary releases beta endorphin into the blood and CSF to cause analgesia at a distance (e.g. the midbrain). Also the hypothalamus sends long axons to the midbrain and via beta endorphin activates the

descending analgesia system. This third centre is activated only at low frequency stimulation.

What is the practical significance of this three level system? When needles are placed close to the site of pain, or in the tender (trigger, or ah shi) points they are maximizing the segmental circuits operating at cell 7 within the spinal cord, while also bringing in cells 11 and 14 in the other two centres. When needles are placed in distal points far away from the painful region they activate the midbrain and hypothalamus-pituitary (cells 11 and 14) without the benefit of local segmental effects at cell 7. (Cells 11 and 14 produce analgesia throughout the body, while cell 7 produces analgesia locally.)

Local segmental needling usually gives a more intensive analgesia than distal non segmental needling, because it uses all three centres. Generally the two kinds of needling (local and distal) are used together, to enhance one another. Another important practical consequence of this system is the frequency/intensity effect. Low frequency (2 - 4 Hz), high intensity needling works through the endorphin system and acts in all three centres, while a high frequency (50 - 200 Hz) and low intensity only activates cells 7 and 11, bypassing the endorphin system. The low frequency produces the analgesia of slower onset, and more importantly, of long duration. Also, its effects are cumulative, becoming increasingly better after several treatments. The high frequency analgesia, in contrast, is rapid in onset but is very short lasting, with no cumulative effects.

Of course some patients will never respond to acupuncture for various reasons: nonresponders may be genetically deficient in opiate receptors. Others may be deficient in endorphin molecules. Hence in clinical practice a strategy must be developed to allow nonresponders to be recognised while not aborting therapy too soon for potential responders who might show delayed cumulative effects. One way is to decide after 5 treatments: if there is no benefit whatsoever, abort; if mild to moderate effects occur continue and reassess after 10 to 15 treatments.

Because acupuncture is so controversial, and relatively new to western medicine, more data are needed to convince the student that the acupuncture mechanisms outlined are well established. Scrutinizing the huge amount of research literature available on the neurophysiology of acupuncture, it should become apparent that we know more about AA than about many chemical drugs in routine use.

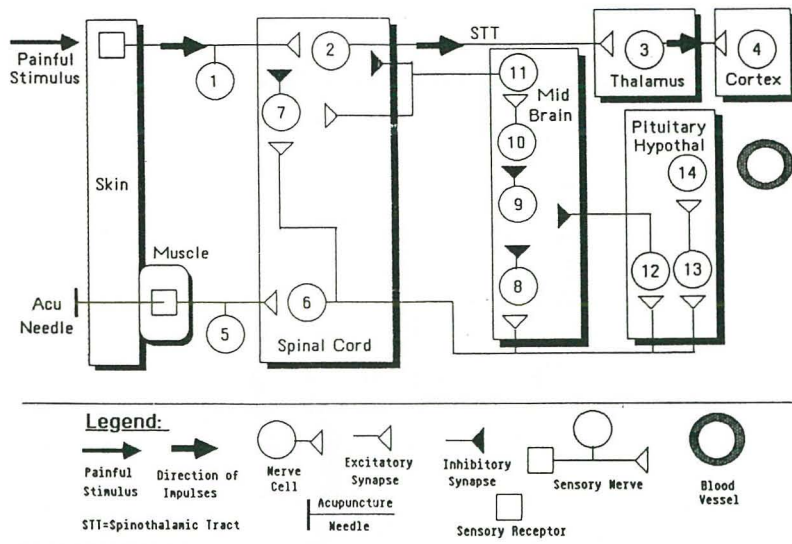


Fig.1. Pain Transmission

4 Scientific Basis of Acupuncture

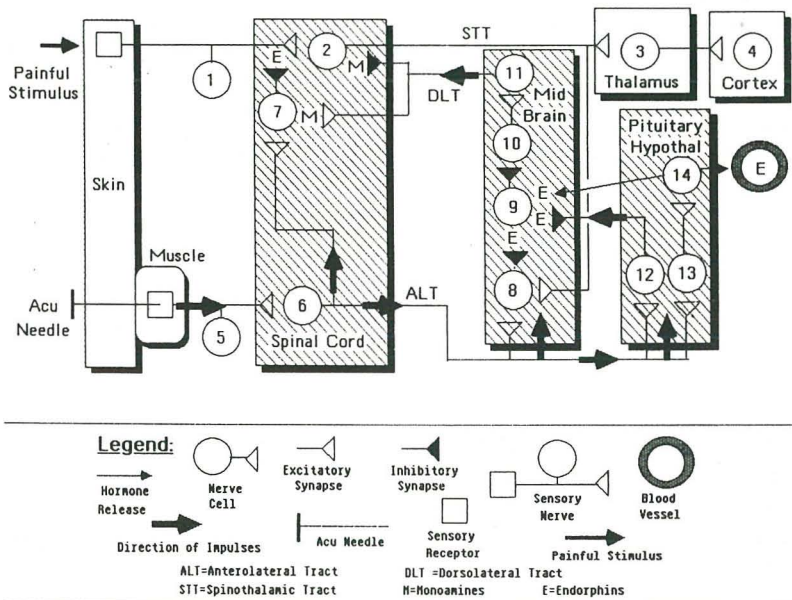


Fig.2. Acupuncture (Low Frequency High Intensity)

6 Scientific Basis of Acupuncture

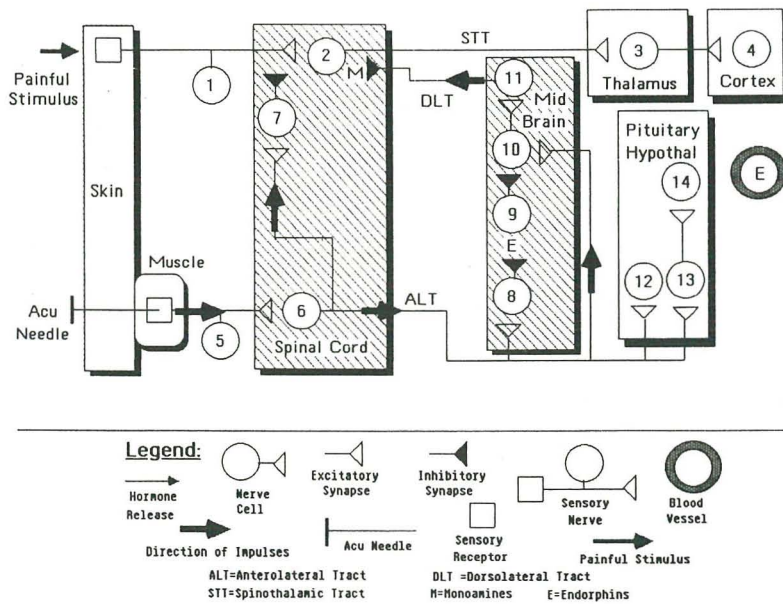
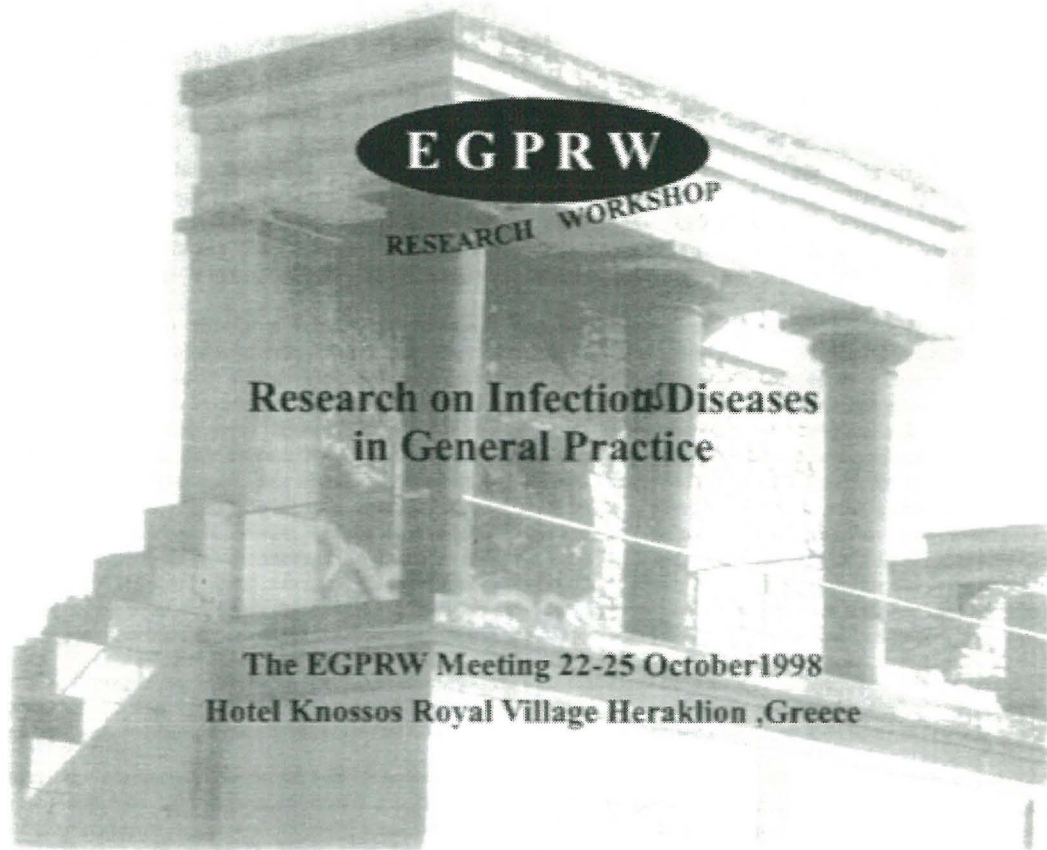


Fig.3. Acupuncture (High Frequency, Low Intensity)



● Scientific Programme

Thursday 22 October (*only for the Executive Board of the EGPRW*)

15.30 - 18.00: Executive Board Meeting (at the Hotel Knossos Royal Village)

Friday 23 October

16.15: Theme Papers/ Freestanding Papers

18.00: Council Meeting with the National Representatives (at the Hotel Knossos Royal Village)

Saturday 25 October

09.00 - 13.30: Theme Papers/Freestanding Papers

One slide five minutes presentations are meant for those researchers who, for example, just to show an idea, or want to raise a question, or would like the attention for an unusual research result. In total, six presentations will be held, with five minutes discussion, so in total one hour is reserved.

● Social Programme

Thursday 22

Reception at the Municipality of Heraklion.

Friday 23

Visit to the Anogia Health Centre and Anogia Traditional Village.

Saturday 24

To be announced.

School of Health Sciences, University of Crete, Greece

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SOCIAL WELFARE MINISTER'S APPRECIATION FOR THE COLLEGE OF FAMILY DOCTORS

8th April, 1998

Dr. Mario Sammut M.D.
Hon. Secretary
Malta College of Family Doctors
St. Philip's Hospital
Sta. Venera

Dear Dr. Sammut,

I enjoyed reading your article "Activities of the Malta College of Family Doctors: Past, Present and Future" in the December 1997 issue of *It-Tabib tal-Familja*.

I augur your College well in the future. I totally agree with your aims to upgrade the status of the Family Doctor to that of a speciality of its own.

I have admired your College's commitment since its inception in 1989 to give Family Doctors the status they deserve. Your CME programmes and other activities are obviously useful but what is paramount in my opinion is a formal training programme in Family Medicine. Obviously such a venture cannot be achieved by the College alone in our particular case. You need the support of the Government, the Department of Health and the University.

Naturally I cannot agree with your statement that such an activity was not possible prior to August 1987 in view of the ten-year medical dispute. The facts show otherwise. You seem to have forgotten that the Faculty of Medicine & Surgery well prior to this date was well aware of the need of a formal post-graduate training for family physicians. In fact it was during my deanship that serious discussions were held by the Faculty Board on this subject. These discussions led to a contact with the University of Toronto through Professor Douglas Johnson who was very eager to help us with such a project. Both the Ministry of Health and the University of Malta at that time supported such a venture. Eventually a 9-month intensive course was agreed upon as a first step towards a more structured and formal programme in later years. Professor Johnson was in fact invited by the University of Malta as a visiting Professor so as to conduct this course throughout 1987-88.

I believe, if my memory serves me well, that the graduates who completed the course were rewarded with a certificate which was issued by the University of Malta as well as that of Toronto. Before his departure from Malta, Professor Johnson also left a detailed report on the Development of Family Medicine in Malta for the consideration of the competent authorities. That was 10 years ago. It is a pity that the competent authorities at that time did not respond to that report or indeed to the further pressure the Malta College of Family Doctors continued to exert since then.

All the above had happened and therefore it is part of our history. I cannot understand how you could have completely omitted such relevant information in your otherwise well documented article.

Nonetheless I do wish your college every success in its endeavor to upgrade the status of Family Physicians in our country.

May be you would want to publish this letter in your column "Letters to the Editor" in the next issue of the journal.

Prof. Edwin S. Grech

HONORARY SECRETARY'S REPLY AND ACKNOWLEDGEMENT

1st May 1998

The Hon. Prof. Edwin S Grech
Minister of Social Welfare
Palazzo Ferreria
Valletta

Hon. Minister,

Thank you for your letter dated 8th April 1998 regarding the above article written by the undersigned, which appeared in the December 1997 issue of *It-Tabib tal-Familja*.

I am writing to apologize for the omission referred to in your letter, regarding the '9-month intensive course' for family physicians, conducted in 1987-88 by Prof. Douglas Johnson of the University of Toronto under the auspices of the University of Malta, preparations for which were made by the Faculty of Medicine and Surgery under your deanship 'prior to August 1997'.

Your letter was presented at a meeting of the College Council on the 27 April, which accepted that it be published in the next issue of the College Journal.

Finally, on behalf of the College, may I thank you for your best wishes 'in its endeavor to upgrade the status of Family Physicians in our country', and trust in your continuing valuable support in this matter.

Mario R Sammut MD
Honorary Secretary
Malta College of Family Doctors

FURTHER REFLECTIONS ON THE HISTORY OF HODGKIN'S DISEASE IN MALTA

2nd April 1998

The Editor
It-Tabib tal-familja
Santa Venera

Dear Editor,

In the article on Dr. Thomas Hodgkin, Dr. P. Cassar outlined the 19th connection of this renowned pathologist with the Maltese Islands. Dr. Hodgkin is today associated with a specific type of lymphoma which he had originally described in 1832, a condition that was eventually conferred the eponym of Hodgkin's Disease in 1864. The article in question inadvertently gives the impression that Maltese medical practitioners became aware of the disease only in the mid-20th century after the use of chemotherapy for the disease. In fact the 19th century medical practitioners were generally well versed and updated with the medical literature of the time, and were fully aware of Hodgkin's Disease as a specific disorder.

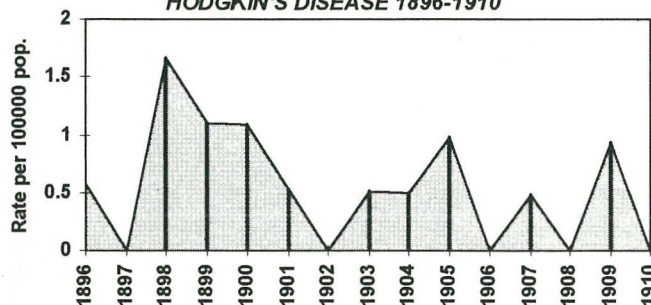
The first definite reference to Hodgkin's Disease in Malta can be found in the death reports of the late 19th - early 20th century. Death certification by cause was made a legal requirement in 1870 (MGG, 26 July 1870: 2448:p.221). Fortnightly reports of these returns were subsequently published by the Chief Police Physician after 1st May 1872 (MGG, 31 May 1872: 2522:p.181). After 1896 this mortality data was amalgamated with other epidemiological data in a series of annual health reports. The first sixteen annual reports (1896-1910) included Hodgkin's Disease as a specific cause of death pertaining to the group Disease of Lymphatic System. Subsequent reports after 1910 failed to include Hodgkin's Disease as a specific cause of death.

During this 16 year period (1896-1910), the disease affected 6 individuals aged under 10 years, 6 individuals aged 10-35 years and 4 individuals aged 35 years or more. There was thus

an average of one case annually with an overall specific mortality rate of 0.54 per 100000 population (Annual Health Reports for years 1896-1910). This rate contrasts with the mean figures for the three year period 1992-94, where an overall crude specific mortality rate of about 1.00 per 100000 was reported. The overall crude incidence rate for the same period was 3.09 per 100000 population. The age standardized mortality annual rates for 1992-94 ranged from 0.5-1.2 for males and 0-1.2 for females; while the age standardized incidence annual rates ranged from 0.6-5.1 for males and 2.4-3.9 for females, the differences being probably due to the small number of cases (National Cancer Registry: Annual Reports 1992-1994).

C. Savona-Ventura

ANNUAL CRUDE SPECIFIC MORTALITY RATE FROM HODGKIN'S DISEASE 1896-1910



YEARS	INCIDENCE CRUDE RATE per 100000 pop.	MORTALITY CRUDE RATE per 100000 pop.
1896-1910	?	0.54
1992-1994	3.09	1.00

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