Plenary Sessions

Thursday 29th November

Plenary I Changing the future of hpb surgery through robotics Long Jiao

The past three decades have witnessed the rapid emergence of minimally invasive surgery leading to a total re-evaluation of conventional surgical approaches across all specialties. Since the first laparoscopic cholecystectomy was performed in 1985, the technology has evolved with evident patient benefit. There are, however, inherent challenges in laparoscopic surgery and this has led to robotic solutions. In 2000, the Da Vinci robotic system (Intuitive Surgical Inc., Mountain View, CA) gained FDA-approval. In the same year, a French team used the Da Vinci to perform the world's first robotic radical prostatectomy. Robotic surgery has several advantages to the normal laparoscopic approach. It provides a three-dimensional visual field with depth perception. Its 'wristed' instruments provide the natural seven degrees of motional freedom mimicking open surgery. These advances increase dexterity and improve hand-eye coordination to perform cases that were deemed unfeasible laparoscopically. Robotic surgery is gaining momentum in many surgical specialties including urology, colorectal surgery, cardiothoracics, neuro-surgery, gynaecology and endocrine surgery. Despite the pioneering laparoscopic operation being a cholecystectomy, Hepato-Pancreato-Biliary (HPB) surgery has not yet widely embraced minimally invasive surgery (MIS). While some other specialties are achieving 70% of surgery using MIS, this is only true in less than 10% of HPB operations. However, high volume tertiary centres, with trained HPB surgeons interested in MIS, are performing liver and pancreatic resections with these techniques. HPB operations are technically extremely difficult with laparoscopic techniques even in expert HPB surgeon's hands as reflected by unexpected early termination of LEOPARD 2 trials for safety issues related to laparoscopic group. However, the advantages of robotic surgery can overcome the inherited problems related to the laparoscopic surgery by allowing us to perform more complex and difficult tasks with ease in hepatobiliary and pancreatic surgery and more of our patients to safely undergo MIS.

Plenary II Evidence based approach to pleural disease in 2018 Najib Rahman

This presentation will cover a rational, evidence based approach to pleural disease. It will cover symptoms, physiology, initial diagnostic pathway based on current understanding of aetiology and techniques with the highest diagnostic yield. It will discuss randomised trials assessing optimal management in various pleural conditions including malignant pleural effusion and pleural infection, enabling the clinician to approach their patient from an evidence based standpoint.



Friday 30th November

Plenary III Preparing learners to inherit the earth Valerie Wass

As medical educators we tend to hold arguably fixed views working across divides; "undergraduate-postgraduate", "secondary –primary care" and "generalism - specialism" and to retain an entrenched retrospective view that "trainees are not as good as we were in our day." Are we ducking the challenges facing the young and failing to prepare them for the unknowns of their future world? We need to break the traditions of our own learning, change our visionary focus, and develop a continuum of educational partnership with our young. Unless we do this we risk a workforce unprepared to inherit the ever increasing complexity of global health care.

"Just in case education" No longer necessary except if perhaps a Robinson Crusoe.

Sugata Mitra



Plenary IV: Cannabinoids as recreational or therapeutic drugs Jorge Manzanares Robles

The consumption of cannabis has spread throughout the world population as one of the most consumed drugs, mainly among adolescents. One of the main problems is the lack of scientific information in this regard that seems to separate its consumption from the appearance of secondary effects which means that consumers and in some cases governments of different European, North American and Latin American countries reduce the penalties for their consumption and trafficking but also allow and enhance their production. It is important to point out that the consumption presents numerous problems and the population and the governments must be informed from the point of view of the scientific evidence. Thus, there are neuropsychiatric, endocrine problems, cognitive disorders, increase in the appearance of psychotic outbreaks in vulnerable subjects and increase in the possibility of switching to other different drugs of abuse. There is an evident abstinence syndrome with functional alterations in brain receptors related to the reward systems.

On the other hand, in the last 20 years a new cannabinoid neurotransmission system has been identified, characterized by the presence of two receptors (CB1 and CB2) different endocannabinoids and enzymes that regulate the transport and metabolism of cannabinoids. In this sense, due to the wide distribution of receptors, there are many potential therapeutic applications in the treatment of pain and several neuropsychiatric diseases. It is important to point out that recreational consumption should not be confused with the administration of medicines containing natural or synthetic active substances derived from cannabinoids, prepared in specific pharmaceutical forms, with a precise dosage and prescribed by a physician to alleviate the symptoms of different diseases.

In conclusion, cannabis and its derivatives are clearly "drugs" that produce side effects like other drugs of abuse but also the active principles of cannabis can be considered "medicines" when they are prepared in a controlled manner and are prescribed by authorized personnel to patients suffering from different clinical conditions.

Saturday 1st December

Plenary V: Optimising the treatment of metastatic prostate cancer Gerhardt Attard

The management of metastatic prostate cancer has undergone unprecedented improvements in the past decade. Survival has improved more than three fold with a sub-set of patients benefiting from remissions lasting several years. The talk will describe the innovative clinical trial designs, informed by a deeper understanding of the underlying disease biology, that have contributed to some of these advances. Patents diagnosed with metastatic prostate cancer now receive either docetaxel or abiraterone in addition to castration. All, except men with polymetastatic disease, also benefit from radiotherapy to the primary. Nonetheless some patients still relapse rapidly and smart combinations are urgently required to further improve outcomes. Plasma DNA analysis has identified that the majority of patients who develop resistant disease within one year of starting androgen deprivation therapy are characterised by amplification of the androgen receptor in the resistant tumour clone. Smarter biomarker-directed therapies are now in development to prevent emergence of this lethal phenotype.

