

CYSTS OF THE JAWS

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The clinical behaviour of cysts of the jaws has been under close scrutiny over the last few years as it has been found that there is in some types a distinct risk of recurrence, (Bramley & Browne 1967, Fickling 1965, Toller 1967). This recurrence may occur even after as long as 20 years (Browne 1970), so that long term follow-up is essential. The clinical and histological features may be important clues in determining the prognosis and the risk of recurrence of the various jaw cysts. We have collected the data of jaw cysts seen at the Dental Department, St. Luke's Hospital during the decade 1960 — 1969 in order to establish a base line for future comparative studies.

Classification

Classification of cysts is based on clinical, radiological and histological features, with different authors giving emphasis to one or other of the features. We have followed the classification given by Killey and Kay (1972). The chief difficulty is the placing of the so called 'residual' cyst'. We have included all the residual cysts as 'periodontal — residual', except those showing keratinisation which we listed as 'odontogenic keratocysts'.

The relationship of the 'primordial cyst' to the 'odontogenic keratocyst' is also undecided and we have not distinguished between the two types.

Results

Incidence

There were 49 patients with cysts of the jaws and histological examination was made in 31 cases.

Table 1

Incidence of Cyst Types

Odontogenic	
Periodontal	No. of Cases
(a) Apical	15
(b) Lateral	—
(c) Residual	13
Dentigerous	9
Odontogenic Keratocyst	6
Fissural	
Nasopalatine	
(a) Incisive canal cyst	2
(b) Cyst of the papilla palatina	—
Globulomaxillary	—
Nasolabial	—
Median Mandibular	—
Median Fissural	—
Bone Cysts	
Solitary Bone Cyst	1
Stafne's Idionathic Cavity	—
Aneurysmal Bone Cyst	—
Multiple Cysts	3
TOTAL	49

The preponderance of periodontal cysts (30.6%) agrees with most large surveys reported (Fickling, 1965; Killey & Kay, 1972), as does the percentage incidence (16.3%) of dentigerous cysts. Comparison of the incidence of the odontogenic keratocyst is difficult as various authors have different views, some dis-

Table 2. Age Distribution

	Periodontal		Dentigerous	Odontogenic Keratocyst	Nasopalatine	Solitary B.C.	Multiple Cysts	Total
	Apical	Residual						
0-10	1	-	2	-	-	1	-	4
11-20	7	1	1	1	-	-	-	10
21-30	1	2	1	1	1	-	1	7
31-40	2	1	1	-	-	-	-	4
41-50	2	3	3	-	-	-	1	9
51-60	2	6	1	1	1	-	-	11
61-70	-	-	-	1	-	-	1	2
71 +	-	-	-	2	-	-	-	2

tinguishing the primordial cysts as a separate entity (Fickling, 1965). The incidence of odontogenic keratocysts (12.3%) in our series closely resembles that of Hjorting, Hansen *et al* (1969) of 11.2% who used similar criteria in classifying the cyst types.

cyst. McIvor (1972) states that odontogenic keratocysts with the radiological features of dentigerous cysts occur in a relatively young age group, commonly cause expansion of bone, are larger than average on presentation and do not recur after removal.

Table 3. Sex Distribution

	Periodontal		Dentigerous	Odontogenic Keratocyst	Nasopalatine	Solitary B.C.	Multiple Cysts	Total
	Apical	Residual						
Male	8	10	8	5	1	1	3	36
Female	7	3	1	1	1	-	-	13

Age Distribution

Peak incidence occurred in the 2nd and 5th decades: The apical periodontal cysts responsible for the peak in the second decade (70%) while the residual periodontal cysts that in the 5th decade (55%). The youngest patient was 6 years old, the eldest was 77. The keratocysts which occurred in the 6-8th decades were clinically residual cysts, whilst the two occurring in the younger age group had radiological features of an apical periodontal and a dentigerous

Sex Distribution

There is a higher overall incidence of jaw cysts in males (35) than in females, which accords with the finding of other authors, (Cabrini, 1970; Killey & Kay, 1972).

Killey and Kay (1972) point out that this finding may reflect a tendency for females to be more dentally conscious than males, which could influence the periodontal cysts but it is difficult to see it could affect the other cyst types.

Table 4. Site Distribution

	Periodontal		Dentigerous	Odontogenic Keratocyst	Nasopalatine	Solitary B.C.	Multiple Cysts	Total
	Apical	Residual						
Maxilla	12	11	6	2	2	—	2	35
Mandible	3	2	3	4	—	1	2	15

Site Distribution

Much emphasis has been made on the site of cystic lesions especially on those which are not related to the crown or root of the tooth, as the site may be an important clue in defining the cyst type and prognosis of the lesion (Bramley & Browne 1967, Flickling 1965, Hjorting-Hansen 1969, McIvor 1972).

There is a greater tendency for cysts in the maxilla (71%) than there is in the mandible.

- (a) Apical periodontal cysts: In the maxilla 75% were located in the anterior region, 25% in the posterior region. The incidence in the molar regions of both the maxilla and mandible approximate each other.
- (b) Residual periodontal cysts: There is a very low incidence in the anterior region of the maxilla and a high one in the posterior region. This is related to the expansion of the cysts into the antrum rather than intraorally whilst still in the apical periodontal form, and left behind as residual cysts.
- (c) Dentigerous cysts: In the upper arch dentigerous cysts were mostly related to unerupted canines. Those in the lower arch were predominantly associated with unerupted canines, premolars and third molars.
- (d) Odontogenic keratocysts: These were

found most frequently in the body and ramus of the mandible. This type of cyst was also found in the maxilla; Ratio Maxilla: Mandible 1:2. These findings agree with those of McIvor (1972).

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