

MIXED-CELL TUMOURS OF THE PALATE

11 PERSONAL CASES

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This group of mixed-cell tumours of the palate is known by a variety of names. The growths are probably the result of a metaplasia of salivary tissue, adult or embryonic, and hence the variation on microscopic examination and the varying terminology. The tumours are very slow growing. They are not always encapsulated and, especially in the mucosa of the hard palate, a line of demarcation is not easily found. For this reason there is a tendency to recurrence if the excision is inadequate. In very occasional cases malignant changes are found in the tumour.

Clinical Appearances

Generally speaking the tumours were similar in appearance. They were situated at the junction of the hard and soft palate, on one side of the midline, although the very large tumours extended in all directions. Being sessile, the one-sided origin could still be made out.

The tumours varied in size, the smallest being the size of an almond, the largest, which almost closed the oropharynx, the size of a tennis ball.

They were fairly well-circumscribed and sessile, although

the very large ones were tending to pediculate. The part of the tumour that was situated in the soft palate was more sharply defined. The surfaces were smooth or slightly lobulated.

On palpation, the majority of the lesions felt hard or rubbery in consistency, although 2 of them felt cystic.

In the hard palate, the tumour is intimately blended with the mucoperiosteum, but the mucous membrane of the soft palate is quite mobile over the tumour. Ulceration of the overlying mucosa from trauma may be found, especially with large tumours, when the mandibular teeth bite into the mass. Some of the very large tumours produce loosening and displacement of the related molar teeth.

X-ray Examination of the Palate

Bony destruction of the palate was never evident on the X-ray, although at operation one noticed a tendency of these tumours to cause pressure resorption and cavitation without perforation of the related palatal bone, especially in the vicinity of the greater and lesser palatine foramina.

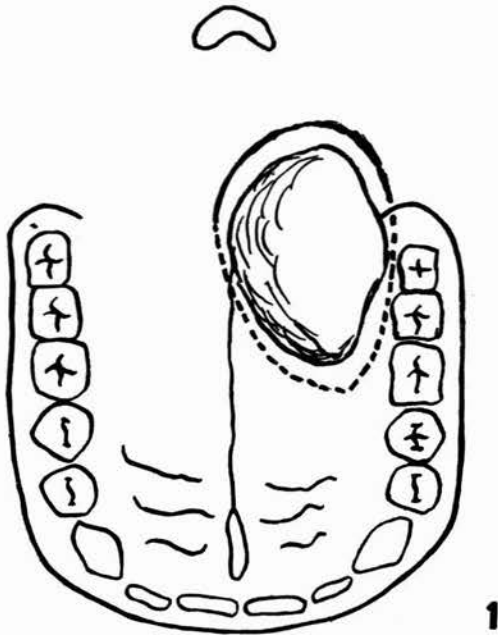


Fig. 1. A diagrammatic view of the palate and a mixed-cell tumour, showing the first part of the incision in the hard palate (broken line), and the completed incision in the soft palate (unbroken line).

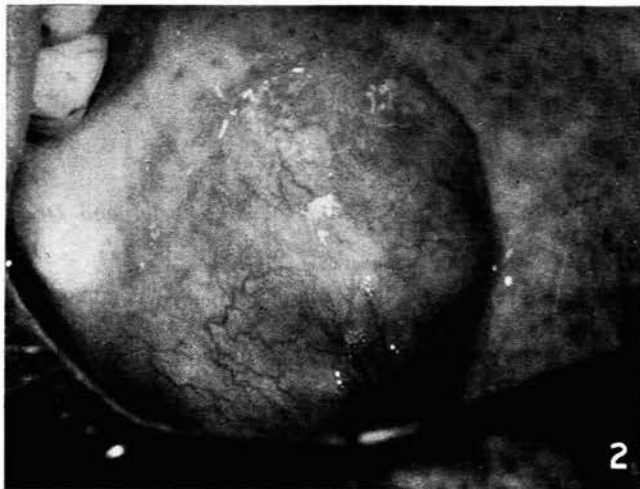


Fig. 2. This shows a typical mixed-cell tumour of the palate. It is more to the right side than the left. Note the situation at the hard-soft junction.

Symptoms

Because of their slow growth, these tumours are relatively asymptomatic. With some there is no pain, with others, bouts of slight pain, especially if ulceration and superimposed infection are present. Very large tumours may interfere with swallowing.

Treatment

The treatment is surgical, and there is a tendency to recurrence if removal is inadequate. It is preferable to

carry out a block removal of the lesion, going well beyond into normal tissue.

Before operation a dental impression is taken of the teeth and palate and a special prosthesis made. This is used to support a skin graft after the excision. At operation an incision down to bone is made in the mucoperiosteum of the hard palate. The incision around the anterior part of the tumour is similar to the one used in the preparation of one of the flaps for the Wardell-type repair of a cleft palate. The flap containing the mass is now lifted directly off the bone and reflected backwards until the end of the bone of the hard palate is reached. With this method the greater and lesser palatine vessels are easily exposed as they emerge from their respective foramina, and thus bleeding is easily controlled. Furthermore, one can easily enucleate any deep extension of the tumour, which is usually found in and around the greater palatine foramen. At the foramen a catgut tie can be placed around the emerging neurovascular bundle and the flap containing the tumour can be freed from the bundle. Having been taken so far, the incision is then continued through the mucosa of the soft palate around the rest of the mass and removal of the mass is completed by enucleation. In the soft palate the tumour is well encapsulated. By means of moulded surgical guttapercha attached to the prepared prosthesis a skin graft is then inserted into the defect. The prosthesis is wired to the standing teeth. The graft and guttapercha also act as a haemostatic agent.

The prosthesis is left in position for about 10 days and is then removed. By this time the skin graft has attached itself.

CASE REPORTS

As the features of the following cases are so similar, and have already been generally discussed, it is my intention to mention only the salient points.

Case 1

F.H., African female, 37 years of age. Admitted to hospital on 6 May 1957. Presented with a swelling in the palate which had been present for 1 year. Occasionally painful and tender. A hard, fairly well-circumscribed mass about the size of an almond was seen in the palate. The operation was one of excision and graft.

Histological report. Section of this tumour from the palate shows the features of a 'hypernephroid' or clear-cell type of mixed salivary-gland tumour.

Case 2

M.K., African female, 65. Admitted to hospital on 25 June 1957. Presented with a swelling in the palate which had been there for about 1 year. For 1 week before admission there had been haemorrhage from this mass because of ulceration and infection. On examination, a firm mass about the size of a large marble was seen and felt in the palate. This mass was removed.

Pathologist's report. The specimen submitted consists of a tumour $3\frac{1}{2} \times 2\frac{1}{2} \times 1\frac{1}{2}$ cm. The tumour is well encapsulated except in one area. It is covered on one surface by epithelium. A small piece of bone is present in the specimen. Section of this tumour shows the features of a mixed salivary-gland tumour with superimposed heavy chronic inflammatory cell inflammation.

Case 3

D.T., African male, 35. Admitted to hospital on 8 August 1957 with a swelling of the palate which had been present for about 3 years. It was painless but interfered with swal-

lowing. Examination showed a large mass about the size of a tennis ball, coming from the palate and obstructing the oropharynx. The mass was firm in consistency. At operation the mass was excised and the defect grafted.

Pathologist's report. The cut surface of the tumour is white in colour, and shows several hyaline areas and several cystic spaces. Sections of this tumour show the structure of a mixed salivary-gland tumour.

Case 4

A.T., African male, 56. Admitted to hospital on 8 June 1957. A mass was seen in the palate and had been present for about 2 years. The tumour was well circumscribed and felt cystic to the touch. The operation carried out was of block excision and grafting.

Histological report. Section of this specimen from the palate shows the presence of mucus-secreting salivary-gland tissue, infiltrated by a fairly well-differentiated adenocarcinoma. Secretory granules are present in some of the cells.

This patient refused further treatment and failed to return for observation.

Case 5

G.M., African female, 28. Admitted to hospital on 7 June 1957 with history of swelling in the palate which had been there for about 1 year. She sought treatment at this late stage because the mass had become very painful for a week. A well-circumscribed swelling about the size of a golf ball was seen on the right side of the palate at the hard-soft junction. Ulceration of the surface was present. The tumour was removed in the usual way.

Histological report. Section of this tumour shows the typical features of a mixed salivary-gland tumour.

Case 6

M.M., African female, 22. Admitted to our unit on 22 March 1958. A mass was seen in the right side of the palate, present for 10 months and tender to touch. At operation the mass was excised in block, and a skin graft on a mould was used to cover the defect.

Histological report. Sections of this specimen of tumour show the presence of irregular spaces, sometimes cystically dilated, lined by stratified squamous epithelium and cells with a clear cytoplasm resembling sebaceous crystals. Irregular ducts lined by a cubical epithelium were also present. A fragment of a mucus-secreting gland is also present. The histological features are those of a hamartoma, involving sebaceous and sweat-gland elements.

Case 7

A.S., African female, 31. Admitted to hospital on 28 August 1959. Examination of the mouth showed a well-circumscribed mass in the palate, situated on the left side of the palate at its hard-soft junction. The mass, which had been present for about 6 months, felt rather soft on palpation. The operation consisted of block excision and grafting.

Histological report. Sections of this specimen from the palate show the presence of a well-circumscribed tumour composed of rather spindle-shaped cells. There is evidence of old haemorrhage and foci of squamous metaplasia. There is moderate pleomorphism. The tumour is also associated with normal salivary glands. The appearances are those of a basal-cell tumour of glandular origin. These tumours are locally infiltrative and tend to recur if not widely excised.

Case 8

B.M., African female, 34. Admitted to hospital on 15 Feb-

ruary 1961, with a mass of the palate, which had first appeared about 7 years previously. Examination of the mouth showed a well-circumscribed swelling on the left side of the palate at its soft junction. The surface of the mass was lobulated. At operation a block excision of the mass followed by grafting was performed.

Pathologist's report. The specimen consists of a soft round mass, 2 cm. in diameter. It appears to be well encapsulated. Microscopic examination shows the histological features of a mixed salivary-gland tumour.

Case 9

P.J., African male, 30. Admitted to hospital on 20 January 1962, with a swelling of the left side of the hard palate. The operation was carried out in the usual way as previously described.

Histological report. Sections of this specimen of tissue from the palate show the presence of a mixed tumour of salivary-gland origin.

Case 10

E.M., African female, 34. Admitted on 12 March 1962. A mass about the size of a golf ball was seen in the palate. There was extensive surface ulceration of the mass. This swelling, which was very painful, had been present for about 1 year. At operation the mass was excised and a graft applied to the defect.

Histological report. Section of tumour shows cords, bands and acini of cells in a fibrous stroma. In areas there are foci of spindle-shaped cells in a myxomatous matrix. These cords of cells reach to the squamous epithelium overlying the tumour. The findings are those of a mixed salivary-gland tumour.

Case 11

I.M., African female, 30. Admitted to hospital on 1 May 1962. This patient presented with a large mass of the palate, which because of its size practically obscured the whole palate. On palpation the mass felt cystic in character. As the mass was so large, a special cap splint was prepared to carry the skin graft mould used at operation.

Pathologist's report. The specimen consists of a tumour mass, measuring 3½ cm. in diameter. The tumour is partially covered by epithelium, which is loosely attached. Section of this tumour shows the presence of sheets, cords and islands of cells with abundant eosinophilic cytoplasm and fairly large nuclei. These cells are embedded in a stroma that is densely fibrous in some areas and looser with an almost myxoid appearance in other areas. The features are consistent with those of an onchocytoma.

SUMMARY

11 cases of mixed-cell tumours of the palate have been presented.

The histological variation of these tumours has been shown in the case reports.

A technique for the removal of these tumours has been suggested.

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