Medical Memoranda

Synchronous Double Primary Carcinomata

The frequency of multiple primary malignancy has been variously estimated by different authors; in general it would seem to be between 2 and 5% of all cases of cancer. Figures from eight of the more important series are shown in the table.

Author	No. of Necropsies	No. of Malignant Cases	No. Multiple Malignant
Hanlon	3,000	950	18 (1.9%)
Bilello	8,024	1,154	7 (0.5%)
Bugher	4,394	983	30 (3.1%)
Austin	8,124	887	24 (2.7%)
Burke	2,033	583	46 (7.8%)
Tullis	6,836	1,044	21 (2.0%)
Warren and Gates ..	—	1,075	40 (3.7%)
Warren and Ehrenreich	—	2,829	194 (6.8%)

The following two cases are of interest as they are both synchronous double carcinomata, each showing greatly contrasting histological pictures.

CASE 1

A man aged 61 was admitted to hospital on September 5, 1947, with a six-months history of diarrhoea and the passage of blood and mucus, occasional pain on defaecation, with lack of control and excessive flatus, and some loss of weight. There were no symptoms referable to the genito-urinary system.

Physical examination revealed general wasting. On rectal examination a large irregular ulcer was found above the prostate. The latter organ was rather hard and large. The liver and supraclavicular glands were not palpable. Cystoscopy showed the bladder to be normal. A synchronous abdomino-perineal excision of the rectum was performed on September 19, but the patient died ten days later.

Summary of Necropsy Findings.—A mild generalized peritonitis with soft adhesions between the viscera. No fault in the operative sites. No residual growth in the intestines or in the regional lymph nodes. Serial sections through the liver showed a single deeply placed spheroidal metastasis (3.5 cm. in largest diameter). In view of this finding, the lymph nodes alongside the aorta, though macroscopically normal, were taken for histological examination. Moderate general enlargement of the prostate, which was firm and contained a few white areas. Congestion of the bladder; hydronephrosis on the right side. No significant changes elsewhere. The surgical specimen (50 cm. long) presented a carcinomatous ulcer (10 by 7 cm.) with its lower margin 6 cm. from the recto-anal junction.

Histology.—**Rectal primary:**—A well-differentiated tall columnar-cell tubulo-papillary adenocarcinoma, with a metastasis of similar type in one local lymph node. **Liver metastasis:**—Similar in structure to the rectal primary. **Prostate:**—An adenocarcinoma composed of small simple tubules formed by low cuboidal cells about a wide lumen was infiltrating the gland. **Aortic lymph nodes:**—Deposits of secondary adenocarcinoma, unlike the rectal growth but reproducing the small primitive tubular structure of the prostatic cancer. These were present in two nodes, with localized extracapsular extension from one.

The final diagnosis was adenocarcinoma of the rectum with single metastases in a local rectal node and the liver, and adenocarcinoma of the prostate with metastases in aortic lymph nodes.

CASE 2

A married woman aged 70 was admitted to hospital on March 13, 1948, with a three-years history of a small lump in the right breast, about the size of a sixpence. Nine months

before admission the lump became larger and she began to have dyspeptic symptoms. After ten weeks deep x-ray treatment was begun. She had also noticed flatus, abdominal distension, anorexia, and slight loss of weight.

Physical examination revealed a fungating growth in the right breast (upper outer quadrant) with retraction of the nipple and a palpable hard node in the right axilla, medial wall. On rectal examination an ulcer with hard everted edges was found on the posterior wall at the ano-rectal junction. There was no deep fixation. The liver and supraclavicular nodes were not palpable. On March 15 local mastectomy and proctoscopic biopsy of rectal ulcer were carried out. On April 2 the patient was discharged for post-operative deep x-ray therapy.

Histology.—**Rectal biopsy:**—A well-differentiated tall columnar-cell tubulo-papillary adenocarcinoma with origin from rectal mucosa. Infiltration into the submucosa was seen. **Breast tumour:**—Sections showed an intraduct carcinoma of the main nipple ducts, and also infiltration of the breast and cutis by anaplastic growth, composed of small compact groups of polyhedral cells, in which there were only occasional attempts at primitive tubule formation.

The final diagnosis was adenocarcinoma of the rectum and anaplastic polyhedral-cell carcinoma of the right breast.

I wish to thank Dr. G. Cunningham, of St. Bartholomew's Hospital Morbid Anatomy Department, for his help; also Mr. J. P. Hosford and Mr. Ellison Nash for permission to extract and publish clinical notes; and Dr. J. M. Sherriff for assistance in obtaining reference material. I am also deeply indebted to Dr. J. W. Whittick, of the Royal Cancer Hospital, for his painstaking advice and criticism.

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Case of Polyneuritis after Mumps

Neurological complications of mumps are rare enough in this country to make it worth while reporting the following case.

CASE REPORT

A girl aged 4 had a typical attack of mumps just before Christmas, 1947. After two to three weeks she started to get up but complained of pains down the backs of her legs on standing, made worse by walking, and of pains in her hands when they were washed. She was miserable. On January 20, 1948, she was seen in the out-patient department and rheumatism was suspected. After rest in bed and salicylates for a week her symptoms were worse, so she was admitted on January 27.

On examination the child looked tired and pale, walking was difficult, and she could hardly stand up. There was an ill-defined dithery tremor of her upper limbs; power was equal. Her bicep-jerks were present and equal but the triceps- and supinator-jerks were absent. The abdominal reflexes were absent. The lower limbs were of equal power, but after being put to bed she could not stand up again. All tendon-jerks were absent in the lower limbs, except the right knee-jerk. Plantar responses were flexor. She objected to spine flexion beyond a sitting position. Kernig's sign and neck rigidity were equivocal. She was too unreliable for sensory testing. Her tonsils were large and red and the tonsillar glands enlarged. Her temperature was 99.6° F. (37.55° C.) and the sedimentation rate was within normal limits. A throat swab grew *Str. viridans* and diphtheroids. The haemoglobin was 100%, and the white cells numbered 10,300 (53% lymphocytes, 43% polymorphs, 4% monocytes). The cerebrospinal fluid was not under pressure but contained 70 mg. of protein per 100 ml. and 7 cells per c.mm., of which 80% were monocytes and 20% polymorphs; the sugar and chloride levels were within normal limits. A tentative diagnosis of mumps polyneuritis was made.

On February 6 a high titre of mumps serum antibody confirmed the history of mumps. By February 9 she had not improved and her cerebrospinal fluid contained 60 mg. of protein per 100 ml. and 6 cells per c.mm. No evidence of denervation was found on testing her muscle reactions to faradism.

After the middle of February she improved with massage and exercises. All tendon-jerks were absent in her lower limbs on discharge on March 9, although she was walking normally. One month later she was very well and both knee-jerks and the left ankle-jerk were present. After another month all tendon-jerks were present.

COMMENT

Cases of post-mumps polyneuritis are rarer in the literature than encephalitis or meningitis. This case seems to have been one of post-mumps polyneuritis; the diagnosis of poliomyelitis was also considered, as the signs and the finding of polymorphs in the cerebrospinal fluid were suggestive. However, in view of the recent attack of mumps the other diagnosis seemed more likely.

My thanks are due to Professor A. A. Moncrieff for permission to publish this case.

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Parotid Cysts

The following two cases are reported as rare and interesting examples of cysts of the parotid, which are themselves rare.

CASE 1

A woman aged 36 had had a swelling behind the angle of the right jaw for three months. She thought that it was the same size as when first felt; it was not painful, and did not vary in size with meals or inconvenience her in any way. There was no discharge into the mouth nor other symptoms.

On examination an oval lump about 3 by 2 in. (7.5 by 5 cm.) was felt behind the angle of the right jaw, extending up to the ear and apparently including the lower pole of the parotid gland. It was immobile, painless, not translucent, and was thought to be fluctuant, although it was difficult to be sure. It seemed too high for a branchial cyst and too soft for a mixed parotid tumour. There were no other abnormal findings.

At operation a thin-walled multilocular cyst containing clear watery fluid was found entirely covered by the lower pole of the parotid gland. The cyst shelled out with the greatest ease and had no apparent connexion with the parotid.

Pathological Report.—A very thin-walled translucent multilocular cyst 4 by 3 by 2 cm., containing clear, almost colourless watery fluid. Its wall consists of a thin collagenous layer lined by a single layer of flattened or cuboidal epithelium. Lying outside the wall are fragments of salivary-gland tissue. The appearances are those of a simple parotid cyst.

CASE 2

A woman aged 43 complained of a lump near the angle of each jaw and in the left cheek. Five years previously she had had three attacks of "mump-like" swellings and pain in one year, first of the left and then of the right side of her face; but the pain was associated with meals, and at times foul-tasting fluid discharged into her mouth. At first the swellings fluctuated with the discharge, but latterly they had remained the same size.

On examination a firm but not hard lump about 1 in. (2.5 cm.) in diameter was felt in each parotid gland just behind the angle of the jaw, and both parotids felt a little lumpy. There was also a cystic swelling in the cheek in front of the left masseter, in the line of the parotid duct, which by pressure could be partially emptied through Stenson's duct into the mouth. Sialograms showed multiple dilatations of the ducts of both parotids. There were no calculi or obstructions in the ducts. The cyst in the left cheek was excised from within the mouth.

Pathological Report.—A portion of parotid duct 2 cm. in length, with a collapsed cyst about 0.5 cm. in diameter lying alongside it. The cyst is thin-walled with a smooth lining. It has the appearance of a retention cyst, and according to its

anatomical site could be either related to a branch of the parotid duct or to a small mucous gland. It is lined in part by pseudo-stratified columnar epithelium, with some of the cells showing mucus secretion, and in part by chronic granulation tissue. The surrounding stroma shows dense round-cell infiltration and an increase in fibrosis, and in one place there is a group of foreign-body-type giant cells. Along the edge of the specimen are fragments of parotid glandular tissue which also shows very considerable lymphocytic infiltration.

COMMENT

Cysts of the parotid seem to be of five types.

1. Those (usually called adenolymphomas, of which there are numerous accounts in the literature) which are considered to be either ectopic salivary tissue within a lymph gland or pharyngeal lymphatic tissue (Carmichael, Davie, and Stewart, 1935; Plaut, 1942; Willis, 1948) or of branchial origin (Cunningham, 1929; Moore, 1940), although Kraissl and Stout (1933) considered that they rise from the embryonic orbital salivary glands. They usually occur superficially in front of the ear, but may be in the parotid substance or well away from the gland, and may be almost entirely cystic, being filled with turbid brown or mucoid fluid, or part solid. Microscopically they are lined with stratified columnar epithelium which has, typically, high palisade cells in the inner layer. They tend to have papillary projections into the cyst, which may fill it, and contain much lymphoid tissue in the papillae and in the walls.

2. Cysts which occur as the result of degeneration within an adenoma (Hertzler, 1937) or mixed tumour of the parotid.

3. Hydatid cysts occurring within the parotid, cases of which have been published from time to time (Riche and Devèze, 1906; and others).

4. Cysts arising from the parotid duct (Case 2). Of these, the only account I have found is by Kini (1940), who describes a similar cyst (without any parotid swellings) lined with stratified epithelium, connected with the main parotid duct, and lying in the anterior prolongation of the gland. It is of interest to note that Johnson (1896) describes cases of swellings of the parotid gland apparently due to mucofibrinous plugs in the parotid duct, which seem to be similar in nature to the swellings in the glands of Case 2.

5. Simple parotid cysts (Case 1). There seems to be only one previously reported case (Mintzman, 1933), and that was of a cyst within the parotid substance, filled with clear fluid and lined with a single layer of flattened epithelial cells. There was no lymphoid tissue in the wall, but outside the wall were fragments of salivary tissue.

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