improves. The majority of these patients on arrival are unfit for an anaesthetic and the lengthy operative procedure which reduction and immobilization of the fracture with wires, splints, or pins entails. To attempt this is exposing the patient to an unnecessary risk. Frequently, immobilization of a fracture can be achieved only by the use of cap splints, and this means a delay of six to eight hours while they are being constructed.

A relatively simple procedure has been used to relieve the respiratory obstruction, and can be carried out by any reasonably competent person. A No. 8 or 10 Magill nasopharyngeal tube lubricated with 5% cinchocaine hydrochloride ("percaine") ointment is passed through one or other nostril. It may not be easy to do this if the septum is deflected or the nose fractured, and a little manipulation may be necessary. There is invariably some difficulty in passing the tube once it has reached the posterior pharyngeal wall. Continuous gentle pressure, however, usually results in the tube slipping past this obstruction, and respiratory excursions immediately take place freely through the tube. The patients are relieved, anxiety is allayed, and recovery from shock is rapid. The fact that obstruction invariably occurs at the posterior pharyngeal wall indicates that there is approximation of the base of the tongue, the palate, and the posterior pharyngeal wall. In cases in which blood has been aspirated into the lungs a flexible gum-elastic catheter is passed via the nasopharyngeal tube into the trachea and bronchi, and the blood aspirated. This latter procedure, if the patient is still in a confused state, causes no reflex attempts at coughing. In cases in which the level of consciousness is not depressed the gum-elastic catheter will produce a laryngeal reflex which will distress the patient, and it is best then to discontinue the attempt to aspirate. Aspiration, when it does not cause distress, is essential, as the patient is either unable or unwilling to cough. Retention of the blood may lead to collapse of the lung or pneumonitis. Periodic aspiration of the pharynx is also carried out for the purpose of removing saliva or any oozing which may take place, as the patient is unable to swallow or cough.

Occasionally these fractures, particularly Type 1, are associated with head injuries. It is of the utmost importance in these cases that the respiratory obstruction be relieved and cerebral congestion avoided.

Relief of the obstruction, by decreasing restless movement, also allows good x-ray pictures to be taken.

Summary

Five types of fracture of the jaw which may give rise to respiratory obstruction are described and illustrated.

The importance of prompt relief of the obstruction is stressed.

Treatment by means of a No. 8 or 10 Magill nasopharyngeal tube, with periodic aspiration of the pharynx to remove saliva or oozing, is described.

I wish to thank Mr. Rainsford Mowlem for his advice in the preparation of this paper and the nursing staff for their assistance in this work.

The Central Council for District Nursing in London (25, Cockspur Street, S.W.1) has issued a revised edition of its "Directory of District Nursing and Street List for London." The directory lists in alphabetical order the name of nearly every street or place in the administrative County of London, together with the borough and postal district in which it is situated. A reference number attached to each street or place shows in the index the name and address of the nursing association that covers it.

VESICAL CARCINOMA WITH BILHARZIA

BY

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Schistosomiasis on Abadan Island is exclusively of urinary type and is not a common disease. It is known that 25 new cases were reported from the laboratories in 1947 and 46 in 1948. From January 1, 1949, all cases were admitted to the Isolation Hospital, and in ten months there were 50 admissions, 43 being new cases diagnosed by discovery of the ova in the urine, four relapses, and three cases diagnosed at cystoscopy. These are not large figures for a population in the region of 200,000, and it is doubtful whether any of the cases were infected on the island itself. All the cases admitted in 1949 have been interrogated and found to have visited endemic areas in Iraq or Iran. Moreover, no snails of the species *Bulinus*, *Physopsis*, and *Planorbis*, the intermediate hosts of the parasite, have yet been discovered here. No case has previously been known to have developed malignant disease in Abadan.

Case Report

An Iranian man aged 40 was admitted to the Isolation Hospital on March 20, 1949, complaining of painless terminal haematuria for the previous fifteen days. He stated that he had lived on Abadan Island for three years and used the Company's piped water for drinking and washing, but during

Photomicrograph showing ovum of *Schistosoma haematobium* adjacent to a group of tumour cells and separated from a surviving bundle of muscle fibres by fibrous tissue. The terminal spine of the ovum shows clearly.

1947 he spent a month in a village near Ahwaz where the only water available was from the river. He had a suprapubic scar, which he said was from an operation for stone performed elsewhere in 1942, but no details of this were available and no other abnormality was found on examination. The urine examined contained numerous ova of *Schistosoma haematobium* and numerous red blood cells. These findings were repeated on February 26, March 1, April 8, and April 14. On February 22 the red cells alone were found, and on April 27 the urine was normal. On April 27 the patient was discharged. During his stay he had had 22 gr. (1.4 g.) of potassium antimony tartrate.

On July 7 he was admitted to the General Hospital. For several months he had had a dull ache in the right loin and

just before admission an attack of colic. Small stones were passed, and he produced these for inspection. When examined he was tender in the region of both kidneys. No kidney enlargement was felt. His general condition was good. The urine contained abundant pus, *Bact. coli*, and albumin, but no ova. His blood urea was 50 mg. per 100 ml. on July 11, and 34 mg. on July 17. An intravenous pyelogram showed a non-functioning left kidney containing a stone, a moderate hydronephrosis of the right kidney, a distended right ureter, and several small stones in the bladder.

Operation was performed on July 30 under general anaesthesia. The wall of the bladder was found to be replaced by a fibrous mass $\frac{1}{4}$ in. (1.9 cm.) thick. The abdominal contents were packed off and the bladder opened through the posterior surface. The cut surface showed that the fibrous mass extended down to an apparently normal mucosa. Three small stones and a quantity of calcareous material were so adherent to the mucosa that curetting was necessary. As removal of the fibrous mass would have involved cystectomy it was decided to wait for the result of a biopsy, and the bladder was closed with suprapubic drainage through an indwelling catheter.

The histological section of the bladder wall showed the bladder mucosa to be thin, disorderly, very variable in its nuclear staining, and ill-defined on its deep surface. Beneath it an abundance of chronic inflammatory cells were embedded in fibrous tissue containing groups of ova of *Schistosoma haematobium*. None of the ova was calcified and all contained recognizable miracidia. The mass beyond this inflammatory zone was a scirrhous carcinoma with strands and islets of deeply staining malignant cells embedded in dense fibrous tissue which also contained fragments of bladder muscle and occasional inflammatory cells.

On August 20, at a second operation, the right ureter was transplanted into the rectum, the left ureter was divided and tied off (as the left kidney was known to be functionless), and the bladder and prostate were removed entirely.

Discussion

The interest of the case is in its rarity. Ferguson (1911), who first drew attention to the frequent association between carcinoma of the bladder and bilharzia, did so in a detailed examination of 40 cases examined at necropsy. Ten of his cases were of general infiltration of the bladder wall with growth, and in only two of these were ova found mingled with the tumour cells.

An even smaller proportion of the 130 cases dealt with surgically by Makar (1942) were general infiltrations. He described six, but noted that these cases were likely to remain undiagnosed until operative treatment was no longer possible. The absence of cystoscopic evidence is always bound to deceive the clinician.

How far the presence of ova in the bladder wall contributes to the development of malignancy does not appear to be known. Girges (1934) said: "Although malignant disease of the bladder is met with more frequently in Egypt than elsewhere, it is very rare and is not so prevalent as stated by some authors (0.25% in my series)." He attributed to these authors the error of mistaking the exuberant inflammatory masses projecting into the bladder for malignant growth. Strong (1945), however, quotes an investigation by Sourour of 373 cases of urinary bilharzia in men, among whom 78 were found to have malignant disease. Willis (1948), reviewing the literature, observes that as practically all of the bladder reports originate from Egypt, in some parts of which the infestation rate is as high as 90%, the existence of both diseases in the one individual is bound to be a frequent occurrence. On these and other grounds he concludes that, although it is possible that bilharzial cystitis does predispose to carcinoma, the evidence is still not conclusive.

The prognosis in diffuse malignant infiltration of the bladder is gloomy in the extreme. Makar employed total cystectomy in three of his six patients and all died within a year.

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ACUTE ANTHISAN POISONING REPORT OF A FATAL CASE

BY

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In a critical review of antihistamine drugs Hunter and Dunlop (1948) state that in the five years of their therapeutic use no deaths or toxic effects leading to organic change have been reported. Toxic reactions severe enough to necessitate discontinuance of the drugs have been recorded by Kern (1947), Sternberg (1947), Sachs (1948), and others. Fatal cases have been very few; but in 1949 two were reported in the literature, both of which were in young children and were due to accidental ingestion of antihistamine preparations. Rives *et al.* (1949) reported a fatal case in a child aged 16 months following the accidental ingestion of 100 mg. of methapyrilene hydrochloride ("thenylene hydrochloride"). Tobias (1949) recorded another, also in a young child who accidentally swallowed six 0.1-g. tablets of "anthisan."

Below we record a fatal case of anthisan poisoning in which qualitative tests for the active principle of anthisan in the body fluids and the main organs were positive.

Case Report

On June 26, 1949, a healthy female child aged 16 months who was on holiday with her parents at a seaside resort was found in her cot about 10 a.m. playing with a box of anthisan tablets, which she had reached from a small bedside cabinet. Her hands, lips, and tongue were stained green from the tablets, which she had been sucking. Her general condition was unaffected and she continued to play. The tablets contained 0.1 g. of anthisan. The actual number eaten was unknown, but probably was not more than six. As the child appeared normal her mother took her out on the promenade from 10.15 a.m. until noon, when she was returned to her cot in the hotel. About 12.30 p.m. her condition had changed: she was moaning, was unconscious, had muscular twitchings and a profuse catarrhal discharge, was foaming at the mouth and nose, and probably had convulsions. She was taken to the local hospital, where she was found to be dead. Death probably occurred about three hours after eating the tablets.

Necropsy

The necropsy was performed about 24 hours after death. The body was that of a well-nourished female child showing