

evidence of associated gastric and duodenal ulcers, or multiple lesions in the stomach or duodenum.

Gordon-Taylor (1937), in his classical review of the part surgery may play in the treatment of bleeding peptic ulcers, divides the problem of associated haemorrhage and perforation into the three groups mentioned above. He points out the great difference in prognosis between those cases in which the bleeding occurs at the same time as perforation (group 1) and of those in which either of the two complications occurs during recovery from the other (groups 2 and 3). He was able to quote five personal cases in the first group with no mortality. Four of these involved gastric ulcers and one a duodenal ulcer.

Where haemorrhage arises from an ulcer which has recently been sutured for perforation (group 2) all authorities agree that medical measures should be pursued, and, though such haemorrhage is a complication of the most calamitous nature, recovery does sometimes take place.

Where perforation has complicated a bleeding peptic ulcer (group 3) operation is indicated, though a large proportion of cases are not fit for any form of surgery. Gordon-Taylor (1937) states that he has never seen a recovery with or without operation. In a later paper (Gordon-Taylor, 1946) he quotes Avery Jones, who regards severe pain before, and particularly when it persists after, haemorrhage as a point of bad prognostic significance and a possible indication for surgical intervention. The diagnosis of perforation may be difficult in a shocked exsanguinated patient. If an early perforation is not to be missed, surgical treatment, where the patient can be made fit for it, would therefore seem urgently indicated when ulcer pain persists after haemorrhage.

Summary

The subject of associated haematemesis and perforation in peptic ulcers is reviewed. Three cases are presented in which the double complication occurred simultaneously.

Treatment by immediate gastrectomy is discussed.

I should like to thank Mr. Frank Forty, under whom these cases were admitted, for allowing me to operate on them and for the encouragement and stimulating advice he has given both in the management of the cases and in making this record. I am grateful to Miss N. H. Shaw, who is responsible for the photography.

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At a joint meeting of psychiatrists and chest physicians held by the Royal Medico-Psychological Association and N.A.P.T. on November 15 Dr. Andrew Morland discussed the reasons why the incidence of tuberculosis in mental hospitals was seven or eight times that in the general population. He said that although the chances of infection were greater, he felt that the lowered resistance of mental patients due to fears and depressions was a more likely cause. Dr. R. G. Maclaren thought that with mental patients the three chief evils were overcrowding, particularly at night, the grave shortage of nurses, and the low standard of dietary. Also patients sometimes refused to eat and needed much individual attention to get them to do so. Dr. B. T. Mann pointed out the risk to the community at large owing to the high proportion of mental patients discharged each year. Dr. Freida R. Hendeles described the organization of a tuberculosis unit in a mental hospital, and advocated a bed provision of 2½% of the total beds to be served.

BRONCHIECTASIS WITH UNSUSPECTED FOREIGN BODY

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Four cases of bronchiectasis admitted to one chest hospital during the last six years, and treated by resection, were found to have an entirely unsuspected intrabronchial foreign body in the portion of lung removed. In none of them was there any history to suggest the inhalation of a foreign body, even on direct questioning after operation.

Case 1

An unmarried woman aged 22, of no occupation, was admitted on January 15, 1948. She had had pneumonia with haemoptysis in 1945. A further haemoptysis occurred in 1946 (a cupful), and another in 1947, when the severity demanded a blood transfusion. Between these attacks and her admission she had no complaints.

On examination the patient appeared to be a normal healthy young woman. Her weight was 9 st. 2 lb. (58 kg.), temperature 98.4° F. (36.9° C.), pulse 90, and blood pressure 114/80. Air entry was impaired in the left upper zone of the chest. Repeated sputum examinations revealed a mucopurulent trace, but no tubercle bacilli. A blood count showed: red cells, 4,000,000; haemoglobin, 80%; white cells, 9,000. A chest radiograph showed a slight increase in striation in the left lower zone. Bronchoscopy revealed only mucopurulent secretion from the left upper lobe orifice. Bronchography showed lingular and left anterior bronchiectasis; the remaining branches were normal.

Operative treatment was indicated by repeated haemorrhage, and on March 4 resection of the affected lingular and left anterior segments was successfully performed. The post-operative course was satisfactory, and she was discharged on March 13. A follow-up report by her doctor stated that she was well and free from respiratory symptoms.

Examination of the specimen showed bronchiectasis with infection and fibrosis affecting the lingular and left anterior bronchi. Within the bronchus was a mass of inspissated material containing vegetable seed cases and stalks. Microscopical section showed considerable submucosal infection with spherical hyaline bodies, probably also of vegetable origin.

No history was obtained before or after operation of an incident in which the grass seeds might have been inhaled, but on direct questioning after operation the girl's mother said that as a child the patient would often chew stalks of grass.

Case 2

An unmarried woman, a houseworker aged 32, was admitted on December 30, 1947. In May, 1947, dental extractions were carried out under general anaesthesia. A few weeks later she had a cough with foul sputum, occasionally streaked with blood, and in October she was treated for lung abscess with penicillin and postural drainage. Up to the time of admission she still had a cough with a little purulent sputum.

On examination she appeared to be a healthy woman. Her weight was 6 st. 2 lb. (39 kg.), temperature 98.4° F. (36.9° C.), and pulse 80. Her sputum was fetid, purulent, up to ½ oz. (14 ml.) in quantity, and contained no tubercle bacilli on repeated examination. Chest examination revealed impaired movement and air entry with occasional added moist sounds in the right upper zone anteriorly. Her blood pressure was 120/70, haemoglobin 100%, white cells 16,000. A chest radiograph revealed a streaky opacity in the right anterior region, and a dilated bronchus could be seen in the

postero-anterior view. Bronchoscopy showed only pus in the right upper lobe orifice. Bronchography revealed bronchiectasis of the right anterior segment, the anterior part being a little worse than the axillary.

Operative treatment was indicated by the persistence of symptoms in spite of conservative treatment, and on January 20, 1948, the right anterior segment was excised. Convalescence was entirely satisfactory, she was discharged on February 15, and at a later follow-up attendance she was well and without symptoms.

Examination of the specimen revealed a plug of interwoven hair in the anterior bronchus. Section of the bronchus showed that the epithelium had undergone metaplasia to the squamous type. The squamous epithelium showed no hair follicles or secretory glands. The hairs themselves were of various colours. They showed no root structures and appeared to have been cut at both ends. Considerable maceration had occurred, and identification of animal type was not possible. The rest of the segment showed changes of bronchiectasis and infection.

Case 3

A builder's buyer aged 28 was admitted on March 25, 1950. In May, 1941, he had a submucous resection of deflected nasal septum under local analgesia to become eligible for air duties, and later joined the R.A.F. He was quite fit until December, 1941, when he had a 4-oz. (114-ml.) haemoptysis. While this was being investigated in hospital he developed a right-sided pneumonia and right basal empyema for which a rib resection was necessary. He was discharged from the Service, and a year later he had a left basal empyema, which was also drained. This cleared completely, and he was free from symptoms for the next five years. In 1948 he developed a productive cough with about 2 oz. (57 ml.) of offensive sputum daily which continued up to the date of admission. There was no frank haemoptysis, but the sputum showed occasional pink staining.

On examination the patient was seen to be a heavily built man. His weight was 13 st. 5 lb. (85 kg.), temperature 98.4° F. (36.9° C.), and pulse 70. The chest showed bilateral healed empyema wounds. In the left lower zone were multiple coarse moist persistent rales. His blood pressure was 140/90. A chest radiograph showed increased left basal markings. Bronchograms showed gross lingular and left lower lobe bronchiectasis of cylindrical type. Other bronchi appeared quite normal.

He had been conducting postural treatment himself for some months before admission, but symptoms remained, and he regarded his cough and offensive sputum as a severe disability at work. Operative treatment was therefore indicated, and on April 11 left lower lobectomy and lingulectomy were performed. Convalescence was uninterrupted; he was discharged on May 4, and has remained well.

The specimen showed fairly severe bronchiectasis with infection and fibrosis in the lingula and basal segments of the lower lobe. The attached lymph nodes were markedly enlarged. In the section there was one bronchus lined by acutely inflamed granulation tissue which contained a minute foreign body, probably a spicule of bone, which was undergoing absorption.

Case 4

A housewife aged 28 was admitted on May 31, 1944. She had been well until January, 1943, when she developed right-sided pneumonia and subsequently an empyema. The latter was treated first by aspirations and then by rib resection and drainage for 11 weeks. The sinus quickly healed and she became well. In February, 1944, she had a haemoptysis of half a pint (284 ml.), and there was repeated blood-staining of the sputum.

On examination she appeared to be a normal healthy woman. Her weight was 10 st. 2 lb. (64.5 kg.), and her temperature and pulse were normal. Chest examination

revealed a healed empyema scar at the right base. There was limitation of movement of the whole right side, with impaired percussion note at the base; coarse rales were audible at the base, back, and front. There was a trace of blood-stained, but not foul, yellow sputum. A blood count showed: white cells, 10,000; red cells, 5,250,000; haemoglobin, 92%. A chest radiograph revealed no abnormality except old lipiodol in the lung fields and deformity of the right ninth rib from old resection. Bronchography showed: right side, rather irregular bronchiectatic cavities of the saccular type throughout most of the lower lobe; middle and upper lobes completely clear; the left bronchial tree was normal. Bronchoscopy was not performed until immediately before operation. Nothing unusual was noted.

Operative treatment was selected, and on June 1 a right lower lobectomy was performed. Convalescence was complicated by an empyema which required drainage, and there was a small bronchopleural fistula present for a time, but she was well when discharged on October 10, and has remained so up to the time of her last follow-up attendance in September, 1950.

The specimen showed bronchiectasis of the posterior basic bronchus with bulbous dilatation of the peripheral end. This contained a large plum-shaped piece of granulation tissue and alongside it an elongated piece of cancellous bone, 6 mm. long. A section of the dilated end of the bronchus showed mucosa infiltrated with leucocytes and a mass of granulation tissue arising from it.

Discussion

In none of the cases described was any history obtained to suggest the presence of a foreign body. Case 3 showed a particularly small foreign body with apparently disproportionately extensive bronchiectasis, and there is no means of proving that the inhalation of the piece of bone occurred before rather than after the development of bronchiectasis; but the history of a haemoptysis some six years before the development of a productive cough must be regarded as strongly suggestive of the primary inhalation of a foreign body and secondary bronchiectasis.

Haemoptysis marked the onset of the illness in Cases 1 and 3, and the relapse in Case 4. Blood-staining of the purulent sputum was often present in Case 2. Thus in all four cases haemoptysis was a marked symptom. In comparison, only 42 out of 100 typical bronchiectatic cases chosen at random from the hospital records gave a history of haemoptysis or stained sputum.

Summary and Conclusions

Four cases of bronchiectasis with unsuspected foreign body are reported.

Comparison with other cases of bronchiectasis does not show these to be clinically or radiologically distinct, but it is of interest that haemoptysis occurred in all of them and that none was bilateral.

A foreign body lying in a bed of granulations in a bronchus is likely to cause frank haemorrhage, and this may provide a clue to its presence.

The presence of an unsuspected foreign body must always be borne in mind when a case of bronchiectasis is assessed, and all operation specimens should be thoroughly examined to exclude it.

Routine bronchoscopy may not reveal the presence of a foreign body which is the cause of bronchiectasis.

I wish to thank Mr. T. Holmes Sellors and Mr. Vernon C. Thompson for permission to report these cases, and members of the staff of the London Chest Hospital who have helped me in the preparation of this paper.