criticism (*Proc. Roy. Soc. Med.*, 1934, xxvii, 271) that Cushing's syndrome lends no support to the view that the basophil cells are the source of the sex hormone. Certainly hirsuties and amenorrhoea do not suggest that the patient is over-feminized!

It is well known that it is extremely difficult to differentiate between adenoma of the adrenal cortex and pituitary basophilism. It is easier in the present case to exclude a primary thymic carcinoma as the cause of the syndrome, in view of its fairly long duration. The fact that the skiagram showed a small pituitary fossa does not negative the diagnosis of basophilism. The adenoma may be quite small, and has produced no alteration in the fossa in some of the verified cases. The repeated occurrence of haematemesis is of special interest now that E. C. Dodds and R. L. Noble have called attention to the intense haemorrhagic congestion in the acid-producing area of the gastric mucosa, which may result from injection of post-pituitary extracts. Although x-ray therapy produced a temporary aggravation of symptoms, general improvement seems to have occurred later. Marked improvement has been reported by Cushing and by R. D. Lawrence from this method of treatment, and had occurred in two cases recently shown at a meeting of the Association of Physicians in London.

On a balance of the evidence the pituitary seems likely to have been the initial factor here, as, indeed, it is in so many polyglandular syndromes.

PERITONSILLAR ABSCESS IN INFANCY WITH RECORDS OF TWO CASES

BY

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Peritonsillar abscess is a disease which is uncommon in childhood and rare in infancy. The occurrence of two cases in the first year of life is of interest and worthy of comment.

Case I

A boy, born on November 30th, 1933, was quite well until November 30th, 1934, when he became fretful and appeared to have pain in his left ear. On December 1st he was cross and unwilling to take his feeds, and the following day a swelling was noticed below, and in front of, the left ear; saliva issued from the mouth, which was kept open. The family doctor was called in on December 3rd, and administered tablets which produced sweating and promoted a short sleep. In the morning of December 4th the doctor visited the patient again and arranged for his removal to Ruchill Hospital as a possible case of diphtheria.

CONDITION ON ADMISSION

The patient was admitted to hospital on December 4th, at 1.45 p.m., when his temperature was 99° F., pulse 136, and respirations 38. He was a well-developed child. The pulse was soft and the colour rather grey; the skin was dry. The presence of a little chest retraction indicated respiratory embarrassment. There was slight retraction of the head and swelling and tenderness of the lymphatic gland at the left angle of the jaw. The mouth was open and the tongue dry and coated. The throat was inflamed and the left tonsil very prominent, particularly at its upper pole, from the presence of peritonsillar swelling; the left anterior pillar and the soft palate were oedematous. There did not seem to be any retropharyngeal swelling. Aural and nasal discharge were absent. There was nothing abnormal about the heart, lungs, and abdominal organs, and croup was not noted. Kernig's sign was absent and the anterior fontanelle was soft.

DIAGNOSIS AND TREATMENT

The condition was obviously one of left-sided peritonsillar abscess. The diagnosis was confirmed by aspiration through a hypodermic needle, and later by incision through the left

anterior pillar, when yellowish, foul-smelling pus was obtained. Diphtheria antitoxin 8,000 units and 10 c.cm. (3,000 American units) of scarlet fever antitoxin were injected intramuscularly. On the day following admission the abscess was draining satisfactorily through the wound, but there was an appearance of yellowish membrane over the free surface of the left tonsil. The pulse and colour were improved and the patient slept comfortably and took feeds willingly. The tonsil was still inflamed on December 6th, and was covered with a thin film of greyish mucus; next day the tonsil was clean. Further recovery was uneventful, and the patient was dismissed well, with the throat wound healed, on December 14th. The organism isolated from the pus had the cultural and morphological appearances of *Staphylococcus pyogenes aureus*; throat and nose swabs were examined for *B. diphtheriae* and found negative.

Case II

A boy, born on January 28th, 1934, was well until December 5th of that year, when he became cross and had a convulsion. Next day a swelling was noticed at the right angle of the jaw. When the doctor first visited him, on December 7th, the patient had sore throat, shortness of breath, and a cough; later that day he had another convulsion. As time went on the symptoms continued and the swelling became larger. A throat swab on December 11th failed to yield *B. diphtheriae*. Excessive salivation was noticed on December 12th, and, distress in breathing becoming greater, the doctor was called urgently to see the patient in the early morning of December 14th. He decided to have him removed to hospital as a case of membranous croup.

EXAMINATION

The patient was admitted on December 14th, at 1.30 a.m., with a temperature of 98.4° F., pulse 128, and respirations 28. He was rather thin, but otherwise quite normally developed. The pulse was soft and the colour poor. Croup was absent, but slight chest retraction indicated respiratory embarrassment. The skin was dry, the head retracted, and the right submaxillary lymphatic gland markedly enlarged, the left gland to a less extent. The mouth was held open, and the tongue was dry and coated. There was a large amount of frothy mucus at the back of the throat, and the tonsils and fauces were inflamed, the right tonsil being very prominent from the presence of peritonsillar swelling. The protrusion of the tonsil was most marked at its lower pole, a good view being obtained only by firm depression of the tongue. Retropharyngeal swelling was absent, as were rhinitis and otitis. Kernig's sign was not elicited, and the anterior fontanelle was soft. The heart, lungs, and abdominal organs were normal.

The case was one of right-sided peritonsillar abscess. An incision was made through the right anterior pillar at 1.45 a.m., thick yellowish pus being obtained. The patient was given an intramuscular injection of 4,000 units of diphtheria antitoxin and was allowed to settle down. He remained comfortable until 6 a.m., when signs of shock set in; after making sure that local haemorrhage from the throat was absent, resuscitative measures were employed, and the patient was greatly improved by 9 o'clock. Convalescence was uneventful with the exception of the development of a mild serum rash on December 26th. He was dismissed on December 28th, the throat wound being healed. The pus yielded a pure culture of an organism which had the characteristics of *Micrococcus catarrhalis*; throat and nose cultures for *B. diphtheriae* were negative.

Cases in the Literature

In a search of the literature I have been able to find only one record of typical quinsy occurring in a patient under the age of 1 year—namely, peritonsillar abscess in an infant aged 9 weeks reported by Berman.¹ Coffin published details of a child of 21 months who died from haemorrhage complicating peritonsillar abscess.²

As compared with peritonsillar abscess in adults these cases have several interesting features. The onset of the disease may not be appreciated, the patient being unable to draw attention to his condition. The temperature is

comparatively low (in Berman's case the temperature before incision was 100.7°); in adults the temperature is often as much as 104° . Embarrassment of respiration and retraction of the head are more obvious than in adults. In both cases the patients were regarded by their doctors as suffering from diphtheria: the one because of the faucial condition, which, in the absence of a definite diagnosis and although not typical, was most likely at that age to be diphtheritic in nature; the other because of the respiratory distress which brought to mind the question of laryngeal diphtheria. However, the typical bulging of the tonsil and the absence of membrane and of croup were sufficient to correct the diagnosis in each case.

I am greatly indebted to Dr. W. M. Elliott, physician-superintendent of Ruchill Hospital, for permission to publish details of the above cases.

REFERENCES

¹ *Arch. of Otolaryngol.*, 1934, xix, 710.

² *Ann. of Otol., Rhinol., and Laryngol.*, 1911, xx, 482.

Clinical Memoranda

"Tulip Fingers"

This preliminary note is published in the hope that fresh light may be shed on a condition which is causing great suffering in the English bulb fields. It is so bad that an eminent dermatologist is reported to have said that the sufferer's only hope of a permanent cure is to discontinue work among flowers and bulbs, a serious statement for those whose livelihood rests on the industry. "Tulip fingers" adds yet one more to the steadily increasing list of occupational diseases.

The tulip was introduced into Holland about 1554 by Busbecq, who was ambassador in Constantinople, and who probably obtained the bulbs from the Caucasus. Dumas gives a graphic account of the enthusiasm aroused for it in *La Tulipe Noire*. Until about thirty years ago all bulbs were imported direct from Holland; it was then realized that the soil of the Fen country was similar to that of Holland, and cultivation was started at Wisbech and Spalding. The industry is increasing rapidly in consequence of the import duties on foreign bulbs and flowers.

"Tulip fingers" occurs in Holland, but so far as can be ascertained no cure is known. It would appear to be more common in the case of a variety known as Coup-land. Up to 85 per cent. of workers are liable to it, the remainder are immune. It occurs chiefly from July to October, when the bulbs are lifted and graded, and towards the end of this period a certain amount of immunity develops. It also occurs during the flowering season, especially when the flowers are pulled instead of cut, and even more so when the bulbs are cut open to increase the length of otherwise short-stalked varieties. As women do most of this work, it is not surprising that they should be the worst sufferers.

CLINICAL SYMPTOMS

These begin twelve hours after handling the bulbs, and are characterized by intolerable tingling of the fingertips beneath the nail, which become exquisitely tender. An exudation of serum now occurs, followed by a line of granulation tissue between the nail and its bed. Later the nail separates from its bed, leaving a keratinous ridge. Often three or more of these may be visible. The nail itself becomes shortened, and is so brittle that the cutting of one corner with nail clippers results in the whole nail splitting across. Bad cases may develop subungual abscesses; "water blisters" on the dorsum of the fingers, which often extend into the clefts, characterize advanced

cases. There would appear to be another form resembling eczema which occurs in subjects who have once had the disease without having handled flowers or bulbs. This responds to the same treatment.

AETIOLOGY

No cause is known, but three theories have been put forward. *Mechanical*:—The brown outer shell of the bulb, known as the testa, is very sharp and brittle, and it has been suggested that this lacerates the finger in its more exposed part—namely, the junction of the nail and its bed. Against this is the fact that the testa does not usually separate from the bulb as it does in the case of the hyacinth and narcissus, neither of which causes any trouble. The wearing of cotton or leather gloves fails to give any protection, as it would if this were the cause. *Acid secretion*:—The bulb itself has a 4.2 per cent. normal acid reaction, whilst the testa is neutral. It has been surmised that the acid percolates through the testa and so affects the nail bed. *Bacterial*:—Though no organisms have as yet been grown from the bulb, two features suggest a microbic origin, probably saprophytic and spirochaetal. The first of these is the response observed to strong antiseptics, the second is the fact that rubber gloves prevent the occurrence of the disease.

TREATMENT

In the past the only known means of protection was the wearing of rubber gloves, but these are so readily damaged—unless stout, when they interfere with movement—that they were discarded. Plunging the fingers in water as hot as can be borne gives some relief. Various ointments have been tried and found useless. On the assumption that the disease has a bacterial origin, spirit of hydrarg. biniod. (1 in 1,000) is now being used with good effect. Workers are instructed to apply it on a pledget of wool on a match stalk before starting work. Not only does this often prevent occurrence of disease, but it is applicable when the condition has developed, though the initial smarting is painful. It is not a specific, as some cases fail to respond, but so far as can be determined it is the only preparation with any effect on the condition.

I beg to express my best thanks to Dr. Booth, medical officer of health of the Holland Division of Lincolnshire, and to Mr. D. Horton of the Kirton Research Station, for their generous help.

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Repeated Ectopic Gestation

The following case of two ectopic gestations occurring within eight months in the same woman seems worthy of record.

The patient was a Zulu woman, aged about 25 years; she had never previously been pregnant, and gave no history suggestive of gonorrhoea. Her health had always been good, with normal menstruation, until October, 1934, when she was brought to St. Mary's Hospital, Mariannhill, with symptoms of ruptured ectopic gestation. Operation by my predecessor, Dr. K. F. McMurtrie, revealed a gestation sac the size of a golf ball in the right tube, with a quantity of blood in the pelvis. Salpingectomy was performed, and she made a good recovery. I saw her just before she left hospital at the end of October last year.

On May 10th, 1935, she was again admitted here, complaining of lower abdominal pain. Her history was very vague, but the pain had been present for a few days. She had missed her period the previous month, but had again observed blood per vaginam for one day only in the present month. On examination a tender mass could be felt in the left iliac fossa, which moved with the uterus on bimanual