SURGICAL PROCEDURES IN GENERAL PRACTICE

This is one of a series of articles contributed by invitation

QUINSY AND RETROPHARYNGEAL ABSCESS

BY

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The term "quinsy" had in the past a much less restricted application than it has to-day. To mediaeval surgeons cynanche meant any kind of a sore throat—including what appears to have been diphtheria—and even Morell Mackenzie (1880) used quinsy as a synonym for acute tonsillitis. To-day, however, we take it that a quinsy is a peritonsillar abscess—suppuration in the tissues of the soft palate outside the capsule of the tonsil. It does not originate in these tissues, but results from infection of the crypts of the intratonsillar fossa. The fossa, which is often inaccurately named, is confused with the supratonsillar fossa or sinus, above the tonsil and between the pillars of the fauces; it has been called by some authorities the tonsillar recess, superior tonsillar fossa, or crypta magna, and is situated in the upper pole of the tonsil, going right down to the capsule (see Fig. 1). It becomes

FIG. 1.—Diagram of tonsil: A, intratonsillar fossa; B, site of development of peritonsillar abscess.

infected usually after an acute tonsillitis, though this may be transient and the infection may appear to be a primary one in the fossa itself. The mesial end of the fossa is blocked up by the process of inflammation. An abscess forms and bursts through the thin capsule of the tonsil at the deepest part of the fossa. It then spreads into the areolar space between the capsule and the superior constrictor muscle. Sometimes the abscess does not burst through the capsule and a true tonsillar abscess is formed, but this is comparatively uncommon and the symptoms are much less severe than those of a peritonsillar abscess. A one-sided swelling of the tonsil should always be carefully examined and palpated; a tonsillar abscess has been known to be confused with a sarcoma and a mixed palatine tumour.

Symptoms

The condition is most common in young adults and is relatively rare in children. The onset is gradual, though it has been preceded by acute tonsillitis. The temperature is rarely above 100° F.; in an acute tonsillitis the temperature may go up to 103° F. or more. Pain increases progressively until it becomes almost unbearable. The patient feels extremely ill and unable to swallow, sometimes almost choking, with saliva dribbling from the mouth—a characteristic sign. The pain may radiate up to the ear and down to the neck; lateral movements of the head

make the pain worse, and the patient may hardly be able to open his mouth for an examination of the throat.

He commonly has an anxious expression, and his breathing may be interfered with. There is a lot of thick, viscid secretion in the throat, which the patient finds difficulty in removing. One side only is affected as a rule. The soft palate and uvula, as well as the pharyngeal mucous membrane, are congested and swollen, and the tonsil is pushed downwards and backwards. The glands of the affected side of the neck are enlarged and tender. Pus forms about the third or fourth day of the illness, which lasts from about five to fourteen days when allowed to run its course. Actually it never should be allowed to run its course. The complications of this condition may be serious and even fatal, but immediate relief follows evacuation of the pus. Many surgeons are inclined to wait for the abscess to be definitely formed, but it does good and not harm to open a quinsy early rather than late, even if only blood and not pus flows from the incision.

Opening the Abscess

Opening the abscess is not always as easy as it may sound. A gag may have to be used to keep the patient's mouth open, the throat is very swollen, and the tonsil is displaced backwards. The classical site of the incision is at the junction of a horizontal line drawn across the base of the uvula and a vertical line drawn along the anterior pillar of the fauces (see Fig. 2). If the abscess is a large

FIG. 2.—Peritonsillar abscess: A, site of classical incision.

one an incision made at this point will usually evacuate it, but it is not uncommon to fail to open the abscess with this technique, even after several attempts. In most cases this is due to failure to take into account the fact that the tonsil often extends forwards beneath the anterior pillar of the fauces, so that the incision penetrates the substance of the tonsil itself. In my opinion it is much better to make the incision through the intratonsillar fossa, where the abscess has originated, and to do so with blunt sinus forceps rather than with a scalpel or bistoury or other sharp instrument.

TECHNIQUE OF INCISION

The patient should be propped well up in bed, his head being steadied by an assistant. A good light is necessary and is best provided by a forehead light, which leaves both the operator's hands free. (A very efficient one, with a battery that can be put in the pocket, can be bought for 7s. 6d.) The light from an electric torch in the hands of an inexperienced assistant is apt to be unsteady and misdirected. The patient, if he can, may suck a benzocaine lozenge for ten minutes before the incision is made, or the throat may be sprayed with a small amount of 10 per cent. cocaine hydrochloride solution, but no local anaesthetic has much effect in quinsy.

The patient's tongue is depressed with a spatula held in the left hand. A pair of sinus forceps held in the right hand are pushed sharply backwards and upwards under the base of the uvula into the intratonsillar fossa if it can be seen, or at least into the upper part of the posterior pillar of the fauces, for a distance of an inch or more, until the pus is found (see Fig. 3). The sinus forceps are then opened widely to allow

FIG. 3.—Method of opening peritonsillar abscess through the intratonsillar fossa by means of sinus forceps.

of its evacuation. The forceps are quickly withdrawn, the patient's head is bent well forwards to allow the pus to run out of his mouth, and he is then given a warm mouth-wash of bicarbonate of soda solution, glycerin of thymol, or the like.

Tonsillectomy

Sometimes it may be necessary to open a peritonsillar abscess more than once, and if the abscess fills again after a second incision it will be well to consider whether the tonsil should not be removed. There has been a good deal of controversy on this subject of recent years, though as a matter of fact the problem is by no means a new one. Chassaignac, as early as 1859, said that he would not hesitate to remove the tonsil in a case of "tonsil suppuration." It has been suggested by Canuyt and others (1933) that general anaesthesia for this purpose is dangerous on account of the possibility of subsequent pulmonary infection from pus aspirated into the lung, and also that the operation is dangerous because of the fresh field opened up for infection.

Many American, French, German, and other authorities—along with a few in this country—have put their experience of tonsillectomy for peritonsillar abscess on record. With ordinary precautions there seems no reason to believe that pus is likely to be inhaled by the patient, or that the wound made by the tonsillectomy is liable to be any more dangerous than the usual incision made through the soft palate. However, in the vast majority of cases the question will not arise, especially when the abscess is opened in the manner described above. I have personally removed the tonsil for peritonsillar abscess on six occasions only: twice under local anaesthesia, 2 per cent. novocain being injected after spraying with 10 per cent. cocaine, and four times under general anaesthesia. In each case the abscess had filled up again after it had been opened, apparently thoroughly, on two or more occasions. In one instance the abscess was found to be situated at the lower and not the upper pole of the tonsil.

Complications

The complications of peritonsillar abscess, such as oedema of the glottis and haemorrhage, are rare but alarming. There is one type of abscess, fortunately atypical, in which the pus burrows laterally, bursts through the superior constrictor muscle, and becomes localized in the pharyngo-maxillary space. Such an abscess is difficult of approach, and the pus may burrow still further down-

wards and enter the mediastinum. The great vessels of the neck in such a case are close to the abscess cavity and thrombophlebitis may develop in them. In other cases the abscess may ulcerate one of the large arteries in the submaxillary region, and it has been necessary on occasion to ligate the external carotid artery. An abscess left to mature has been known to give rise to cavernous sinus thrombosis. Such complications, however, should not arise if the importance of early and thorough evacuation of the abscess is realized.

Retropharyngeal Abscess

Retropharyngeal abscess is of two types: the chronic, which is of tuberculous origin, usually secondary to tuberculous disease of the cervical vertebrae, and the acute, due to suppuration in the lymphatic glands (the glands of Gillette) situated behind the mucous membrane of the posterior pharyngeal wall. Though present in infancy, these glands gradually disappear as the child grows older, and are seldom present after the age of 2 years. They drain the nasopharynx and pharynx, and their efferent lymphatic vessels go to the upper group of deep cervical glands in the posterior triangle of the neck and beneath the sternomastoid muscle. There are two symmetrical pairs of glands, lying on each side of the vertebral column, so that when they become inflamed, from infection of the nose or throat, the process begins by being one-sided, but it gradually develops in the middle line because of the laxity of the submucous tissue in this region.

Acute retropharyngeal abscess is comparatively rare, but it has been said that probably no acute illness of childhood is more often overlooked. It occurs always in young children and should especially be kept in mind when an infant under the age of 12 months, after an ordinary cold with the usual symptoms of fever and nasal obstruction, shows signs of difficulty in swallowing and in breathing. Dysphagia accompanied by dyspnoea is very characteristic of retropharyngeal abscess. Usually there will be also the signs and symptoms associated with any serious illness in infants, such as high fever, often vomiting, and sometimes convulsions. The infant will try to feed, but chokes, coughs, and cannot drink its milk; it will then put its head back and cry. The dysphagia is caused by the mechanical obstruction due to the swollen pharynx and soon brings about a rapid loss of weight. Dyspnoea is usually noticed later and is also mechanical in origin, the progressive development of the abscess blocking the respiratory tract. The dyspnoea is sometimes spasmodic, and sometimes there is a change in the child's voice.

The condition is often mistaken for some other ailment, such as bronchitis, a foreign body in the larynx or lung, tonsillitis, peritonsillar abscess, oedema of the glottis, diphtheria, or even meningitis. The diagnosis is made by remembering that every sick child should always have its throat examined in a good light. The tongue should be held down by a spatula and the pharynx should be carefully palpated by the forefinger. In retropharyngeal abscess there is a red swelling of the back of the throat, sometimes rather hidden by the uvula; less often the swelling is lower down in the hypopharynx. It feels resistant and rather elastic to the touch; in the later stages fluctuation may be detected.

If the abscess is not opened the outlook is serious. Death may result from oedema of the glottis, asphyxia, or heart failure from pressure on the vagus, and if the abscess bursts spontaneously a septic pneumonia will probably follow. Once the diagnosis is made the abscess should be opened, without waiting for fluctuation.

The infant is wrapped up in a blanket or a towel and laid flat on its back, with a small sandbag or a rolled towel under its shoulders; its limbs are held by an assistant, for no anaesthetic is permissible—in any case the pain is slight and momentary. A spatula is usually all that is necessary to keep the tongue back and a gag should not be needed. With the aid of a forehead light, a pair of sinus forceps is plunged into the most prominent part of the swelling (see Fig. 4) and

FIG. 4.—Opening a retropharyngeal abscess with sinus forceps.

opened widely to allow the pus, which may be profuse in amount, to pour out. The infant is at once held up by its legs, so that the pus cannot get down to the lungs. The drainage is usually satisfactory, but convalescence is slow because the child is generally in a poor state of health before the abscess is opened.

If the abscess points towards the neck, opening through an external incision may have to be considered; but it should not be looked upon as the incision of choice, as used to be the case, for the dangers of opening the abscess by way of the mouth were formerly exaggerated. With ordinary precautions, lung complications should not follow the opening of a retropharyngeal abscess by the method described.

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VOLUNTARY HOSPITALS EMERGENCY BED SERVICE

In our issue of June 4 (p. 1221) we published a short account of the scheme and the objects behind it. The service will come into operation on Tuesday, June 21, at 8 a.m., and it is now possible to give full details, so that practitioners may know how it is worked and how to make use of it. The service will be open from 8 a.m. to 10 p.m. seven days a week in the early stages, and will subsequently be extended to cover the twenty-four hours.

Since it is not possible to estimate accurately the number of calls which will be received, the letters informing doctors that the service is at their disposal, and giving the telephone number, will be sent out in instalments in alphabetical order, so that if necessary the issue can be stopped if it is found that more calls are coming in than the staff can deal with. The issue will be resumed so soon as the staff has been sufficiently increased. In actual fact a larger staff has been appointed than is expected to be necessary to work the day service, so that it is not likely that the sending out of letters will be delayed.

Procedure for the Doctor

When a doctor desires to obtain admission to hospital for an emergency or acute case he can ring up the service, whereupon he will be asked to give his name and telephone number, the patient's name, address, sex, and age, and his diagnosis. He should then say to which hospital he wishes to have the patient admitted. With this informa-

tion the operator will be able to inform him whether or not a suitable bed has been reported free at that hospital. If no bed is free there, then another hospital can be considered forthwith. When a bed is reported free the operator will obtain confirmation from the hospital in question, for it may have been filled since the last report. On receiving confirmation she will book the bed and inform the doctor. There are two points in the course of this process at which it is suggested that the doctor could help the operator and himself: first, by saying at the end of his diagnosis whether it is a medical, surgical, ophthalmic, laryngological, orthopaedic, or other case; and, secondly, by giving a choice of hospitals so that if the bed reported free at one has been filled she can ring the other forthwith without further reference to him.

How Hospital Accommodation is Indicated

It is perhaps well to explain how the list of free beds of all the hospitals is to be kept before the operators. This will be done by means of a large indicator board, on which will be written the names of the hundred co-operating hospitals; against these names tickets will be hung representing the free beds. The tickets will be made in different shapes to indicate the sex—for example, all male tickets will be square, the female ones round, and the children's triangular. The types of bed—whether medical, surgical, etc.—will be indicated by colours. Thus, once the classification of the case is clear the operator will be able to find accommodation almost at a glance.

The operators have not had medical training, but a number of them have worked in hospitals or been doctors' secretaries, and thus have acquired a certain familiarity with medical terms; it is expected, therefore, that they will all soon pick these up. At first, however, and always in the case of obscure or rare cases, it will be a great help if doctors provide a general classification as well as the diagnosis.

As regards the beds indicated as free, it would obviously be ideal if hospitals were to report to the service every time a case was admitted or discharged, thus enabling an accurate up-to-the-minute record to be always available. But this would involve such an expenditure of time and money in telephone calls that it would defeat the object of the service. So a compromise has been struck and, to begin with, the record will be obtained twice daily, at times that have been arranged to suit the individual hospitals. Generally speaking, the first record will be taken between 8 and 10.30 a.m. and the second between 4 and 7 p.m. Only by practical experience can it be decided whether more frequent records are necessary or desirable.

The Service as a Working Experiment

It will be gathered from the foregoing that at first the whole service must be partly in the nature of a working experiment. No service on a comparable scale exists anywhere else, so that the details have had to be worked out to suit the conditions, and all are open to revision in the light of experience. There is no reason why the scheme should not run smoothly after a fairly short period, provided always that the doctors and hospitals alike give it their friendly support.

In conclusion, it is perhaps worth while pointing out that for any given case there are probably some twenty-five hospitals to which it could reasonably be sent, and a survey of all these can be made in a few minutes. For instance, a gynaecological patient in North London could go either to one of the North London general hospitals or, failing that, to one of the Central London general hospitals; or the doctor might prefer to send her to a hospital specializing in diseases of women. It thus seems unlikely that in normal times it will not be possible to find a bed in any of the hospitals in these three groups. It is to be hoped, therefore, that "one call, one bed" will prove an attainable ideal.