

Nose

sinuses and had accumulated at the vertex on that side. Dura mater; after stripping this, swelling and loss of lustre was observed at the site of attachment to the roof of the tympanum. The pia was adherent to this area of the dura by very recent tags of fibrinous exudate. The sinuses were free from ante-mortem clotting. Section of the post-mortem clot showed no abnormality. The dura mater over the sinus had retained its lustre and healthy appearance. Bone: the roof of the tympanum was the seat of a circular opening $\frac{3}{4}$ in. diameter. The bone was spongy, where normally dense and eburnated, and its edge was uneven at the internal quadrant. The area showed an ischæmia, and the substance a sandy, crumbling consistence of necrotic bone.

Notes.—There can be no doubt of the primary osteomyelitis extending beyond the area of operation. This had set up by organisation a path of distribution through the dura to the pia mater. The bone of the roof was crumbly, spongy and cancellous, unlike the more common egg-shell bone. The sinuses were thoroughly searched and contained no tittle of evidence of septic thrombosis. The base was peculiarly free from all infiltration of lymph and the cisterna contained clear fluid.

ABSTRACTS

NOSE

The Treatment of Paroxysmal Rhinorrhœa (Vaso-motor Rhinitis) by Alcohol Injections into the Spheno-Palatine Ganglion. FEIN (Vienna) (*Verhandl. d. Gesellsch. Deutsch. Hals-, Nasen-, und Ohrenärzte*, p. 146, May 1921.) Leipzig: Kurt Kabitsch.

The spheno-palatine ganglion lies in the spheno-palatine foramen behind the posterior end of the middle turbinal, and sends the greater part of the nasal branches anteriorly and inferiorly along the lateral wall of the nose as well as into the posterior regions.

To reach the ganglion with the needle a portion of the inferior or of the middle turbinal must be sacrificed. (The details of the operation are not given.)

Only two cases had been treated, one with very great benefit.

Discussing this paper Bönninghaus cogently pointed out that the symptoms of the condition indicate an irritation of the area supplied, not by the branches of the spheno-palatine ganglion, but by those of the ethmoidal branches of the first division of the fifth cranial nerve. (This was the rationale of the treatment of vaso-motor rhinitis carried out some years ago by Yonge of Liverpool, D.M.)

Abstracts

Several subsequent speakers reported that they had obtained good results in this disease from the use of methylatropin nitrate ("Eumydrin") internally.

DAN M'KENZIE.

LARYNX.

The X-ray Treatment of Tuberculosis of the Larynx. Zange, Kander, and Discussion (*Verhandl. d. Gesellsch. Deutsch. Hals-, Nasen-, und Ohrenärzte*, p. 61, May 1921.) Leipzig: Kurt Kabitsch.

Zange said: Tubercle bacilli are not killed by X-ray radiation, but tuberculous granulations are affected, particularly if there is much round-cell infiltration, part being destroyed and part cicatrizing according to the dose. "Effectively irritative" doses only can be expected to have any result. The higher doses, although still more beneficial, cannot be employed by reason of their irritative action on the skin.

The sensibility of laryngeal tuberculosis to X-rays varies with each case and can only be learned by experience. In the normal larynx the arytenoid region is more sensitive than the other parts, and this is especially so when it is tuberculous. Deposits on the posterior wall of a pachydermatous type are less sensitive than deposits elsewhere. It is not possible to irradiate the whole larynx equally by external application, because of the different depth of the various regions from the surface, and deposits on the posterior wall are always least affected.

It is necessary to defer each succeeding exposure until the reaction from the earlier one has disappeared, and this is difficult to estimate because the signs of reaction resemble the signs of the disease itself, and reactionary inflammation may still be present although all indications of reaction may have disappeared. With careful dosage under continual supervision the X-rays are one of the best remedies for the disease.

Thirty cases had been treated by him, most of them advanced. Twenty-five underwent improvement, six of which manifested simultaneous improvement of the pulmonary disease and of the general condition. Two cases remained uninfluenced, and three became worse in spite of—or because of—the treatment. All varieties of tubercle of the larynx were treated; in most, the ulcers closed and cicatrized, and infiltration diminished; a few did badly, with widely-spreading ulceration. Sixteen so-called "closed" (*i.e.*, non-ulcerated) cases improved, six of them being "as good as healed."

As regards the application, irradiation was effected from without through two lateral areas, 6 by 8 cm., alternately, at the same sitting. The first exposure was of 40 per cent. "skin-erythema dose," but if the arytenoids or epiglottis were tuberculous, a lower dose was employed. Later on, 50 per cent. to 100 per cent. "skin-erythema

Peroral Endoscopy

doses" were employed and were the most effective. Intervals were made of six to eight weeks or longer, according to the reaction.

In several cases recurrence of the disease occurred after healing, doubtless because the tubercle bacilli were not destroyed.

Kander used hard rays filtered at first through 8 mm. of aluminium, later through 0.5 mm. of zinc and 1 mm. of aluminium in order to avoid irritative reaction of the mucous membrane. According to the state of the patient's nutrition the dose varied from $\frac{1}{5}$ to $\frac{1}{8}$ or $\frac{1}{100}$ of an erythema dose. He used a Veifa intensive apparatus, Coolidge tubes, a secondary tension of 180,000 volts with 2 to $2\frac{1}{2}$ milliampères, with the filters already mentioned, reaching the height of the desired dose in eight to ten minutes. The treatment was continued at intervals of two to three weeks for from three to six months. No other treatment was employed.

Eighteen cases were dealt with: of these, two underwent complete healing, and remained well up to the time of writing. In neither of them did the sputum contain tubercle bacilli. One showed a large ulcer with granulations on the posterior wall and perichondritis of the left arytenoid cartilage. The second showed general infiltration of a type that may be called "lupus" of the larynx, but with ulceration and granulations.

The other cases were still under treatment, but a number had improved. None of the cases had been made worse by the treatment.

DAN M'KENZIE.

PERORAL ENDOSCOPY.

Foreign Bodies of Dental Origin in the Bronchi. CARL P. HEDBLOM.
(*Journ. of Dental Research*, Sept. 1921.)

The writer mentions 55 cases which have come to his notice. The foreign body was a natural or artificial tooth in 43 cases, and the list also includes dentures, fillings, burs, cement, and a broken blade of forceps. The location was the right bronchus in 23 cases, the left bronchus in 20, in the remaining cases the position was not noted. In 18 cases the foreign body was expelled spontaneously. There were 15 deaths in the series.

DOUGLAS GUTHRIE.

Prognosis of Foreign Body in the Lung. CHEVALIER JACKSON, M.D.,
Philadelphia. (*Journ. A.M.A.*, Vol. lxxvii., No. 18, 8th October
1921.)

A prolonged sojourn of a foreign body may give a complete clinical picture of pulmonary tuberculosis even to fatal hemoptysis. The character and properties, physical and clinical of the foreign body,

Abstracts

constitute the most important factor in prognosis, the pathological changes resulting are dependent on (1) the degree of the obstruction to drainage and æration of the tributary lung tissue; (2) the reaction the tissues manifest to the presence of the particular foreign body. Peanut kernels are very irritating, while metallic bodies cause little specific action. A smooth, dense insoluble inorganic substance causes no trauma and little reaction for a long time if drainage and æration are not interfered with. A sharp fragment may be followed by serious consequence, and a grave prognosis if not removed within a few weeks. A case is recorded in which a bullet was removed from a boy, 17 years of age, who, fifteen months previously, was shot in the back between the 7th and 8th rib 8 cm. to the right of the spine. Profuse hæmorrhage followed the entrance of the bullet, but it ceased under rest in bed. After two weeks the only symptom present was pain in the chest. Chest examination showed no physical sign or any pathological condition secondary to a foreign body.

Under local anæsthesia the bronchoscope was passed through the mouth into the right inferior lobe bronchus to a distance of 2 cm. below the orifice of the middle lobe bronchus. The bullet was reached by forceps, detached from its fibrous tissue, and removed along with the bronchoscope through the mouth. The after-history was uneventful.

The author's conclusions are as follows:—

- (1) The prognosis of unremoved foreign body in the lung is grave.
- (2) About 2 per cent. of foreign bodies are coughed up, and in these cases the prognosis is good; but this fortunate termination is too rare to justify waiting, in view of the fact that bronchoscopy in 98 per cent. is successful. As between thoracotomy and waiting for spontaneous expulsion that may never happen, the prognosis of the latter course is less serious.
- (3) The prognosis of thoracotomy for removal of aspirated foreign bodies, so far as can be determined, is extremely grave. For penetrating foreign bodies, it is so grave as to be inadvisable unless suppuration has intervened.
- (4) The prognosis as to bronchoscopic removal of the aspirated foreign bodies is very good (98 per cent. of removals). It may be said that almost any localisable foreign body that has gone down the natural passages can be brought up the same way. The prognosis as to recovery after removal is excellent (98.3 per cent. recoveries). Of 44 cases complicated by abscess or bronchiectasis, in 42 (94.4 per cent.) the patients recovered good health. The risks of a very brief and careful bronchoscopy without general anæsthesia are almost nil.
- (5) The prognosis in a case of penetrating foreign body removed from the lung by bronchoscopy through the mouth, based on the only

Peroral Endoscopy

case so far thus dealt with, is good. The patient had no hæmorrhage, no rise in temperature, was discharged cured three days after the bronchoscopy, and is still in perfect health. A large series of cases will be required to determine the prognosis. The method is necessarily limited to foreign bodies whose smallest diameter is less than that of the main bronchus of the invaded lung. It can be considered justifiable only after careful localisation and studies of lung-mapping in the particular case; otherwise fatal hæmorrhage may be encountered.

PERRY GOLDSMITH.

Foreign Bodies in the Œsophagus. Dr. J. GUISEZ, Paris. (*Bulletin d'Oto-Rhino-Laryngologie*, Paris, September 1921.)

A girl of 19 had swallowed fragments of an electric bulb in an attempt at suicide. Four days later she had severe dysphagia, temperature 101°, and some head retraction. By direct œsophagoscopy overcoming considerable spasm, a putrid slough of the posterior wall of the œsophagus was found 10 cm. from the ostium. Fragments of glass were removed from this region, and the site cleaned. Four days later symptoms recurred. By direct œsophagoscopy, a fistula discharging pus was observed at the site of the former slough. This was dilated with forceps, and a wineglass full of stinking pus gushed out. Recovery was uneventful.

The author records that he has operated on 12 cases of œsophageal abscess by the direct route. In one case more than a pint of pus was evacuated. He insists on the importance of the supine position, with the head lowered for these operations, to avoid asphyxiation. He regards the prognosis of these cases as favourable: diffuse mediastinitis is, however, invariably fatal.

E. WATSON-WILLIAMS.

Œsophageal Abscess. Dr J. GUISEZ, Paris. (*Bulletin d'Oto-Rhino-Laryngologie*, Paris, January 1922.)

In a very lucid article the author gives us his experience of 50 cases of œsophageal abscess. He details 5 cases of unusual interest, all following impaction of foreign bodies. All these were cases of large abscess evacuated by the œsophagosopic tube. The appearances are fully described and several illustrations given.

The site of the abscess is always in the upper third of the œsophagus. First, because this is the commonest site of impaction; secondly, because inflammation lower down produces a mediastinitis and not a circumscribed purulent collection. As Dr Guisez has seen them, they occur always on the posterior wall but may extend laterally.

Abstracts

Projection forwards may occlude the œsophagus and compress the trachea: œdema plays a part in these complications.

Œsophageal abscess is always secondary to trauma, and usually to impaction of a bone (meat, game, or fish). Tooth-plates and round smooth objects such as coins do not appear to produce it. The author records the case of an infant who died from an abscess that followed the blind use of a "coin-catcher" (the coin was found in the colon!) Distinction must be made from prevertebral abscess, or deep suppuration in the neck glands. In these there is not the severe dysphagia. The œsophagoscope is essential for diagnosis and treatment. The swelling is incised, and any quantity of pus up to half a litre may be evacuated. Subsequent progress is usually favourable.

Four types of œsophageal abscess may be distinguished.

(1) The small or submucous. These often rupture spontaneously. The symptoms are slight, mainly some dysphagia. The prognosis is good.

(2) The large or extra-muscular. The collection forms between the muscular wall of the gullet and the adventitious connective tissue without tending to spread along the deep cellular planes. Intense or complete dysphagia and a fetid breath are prominent, but general disturbance is less than one would suppose. The risk is that rupture may drown the patient.

(3) Occasionally true perioesophageal collections occur. The author supposes that in such cases the original trauma carried infection through the adventitious coat of the œsophagus. The deep planes of the neck are infected. Prognosis is grave.

(4) Interstitial phlegmonous œsophagitis, the infective process spreading between the layers of the œsophageal wall; this is rare, rapid, and fatal.

E. WATSON-WILLIAMS.

The Clinical Picture of Œsophageal Atresia. F. GÖPPERT, Göttingen. Münch. Med. Wochens, Nr. 57., Jahr. 68.)

The author maintains that these cases are often undiagnosed in life though the symptoms are typical.

The doctor is usually called because the infant vomits, more seldom because it cannot swallow. Oral inspection reveals a thick mixture of mucus and milk, a fact which should of itself be sufficient to establish the diagnosis as it is not found under any other conditions. If a meal be given the respiratory distress at once becomes evident. During the first two days the child resists each effort at swallowing, by choking and general agitation, but these protective efforts gradually cease.

Faulty diagnosis may be excluded by the careful passage of a bougie.

JAMES B. HORGAN.

Peroral Endoscopy

Plastic Operation on the Œsophagus, the Method and its successful Execution. PAUL FRANGENHEIM. (Münch. Med. Wochens. Nr. 9., Jahr. 69.)

After reviewing the various methods employed, the author gives details of a successful case of this kind carried out by himself after the manner of Roux. The operation was carried to a successful conclusion in three sittings, extending over a period of eight weeks.

The patient, a boy of $6\frac{1}{2}$ years, had swallowed some soda solution eighteen months previously: six months later he began to experience difficulty in swallowing. This was temporarily relieved by the passage of bougies which enabled the child to take liquid nutriment. Fourteen days before admission his troubles had become accentuated, everything being rejected. The screen showed stenosis at the level of the bifurcation of the left bronchus. It was no longer possible to pass a bougie.

In the first instance, a gastric fistula was established through the left rectus near the cardia. An attempt to establish a continuous bouginage through the fistula proved futile.

14th March 1921: Separation of a loop of the small intestine, the continuity of which latter was at once re-established by lateral anastomosis. The lateral aspect of the separated loop was now united with the wall of the stomach, its lower and open end being closed by a continuous suture. The extended loop was now prolonged upwards beneath the undermined skin of the chest and reached as far as the jugular fossa.

14th April 1921: Transverse division of the cervical œsophagus. The distal end having been sewn up was buried, and the proximal end having been brought forward, was fixed in a circular manner to the skin of the neck.

9th May 1921: Attachment of the œsophagus to the upper end of the separated loop of gut by means of a flap of skin, in shape resembling the wing of a deer (türflügelartig).

On 19th January 1921 the patient was discharged. His artificial œsophagus was functioning very well and he was able to eat most foods.

13th January 1921: The gastric fistula is closed. The new food passage is working very well. The intestinal loop lying under the skin shows well-marked peristalsis.

Up to the present there are literary records of 28 successful cases of œsophageal plastic operations of various kinds. In one case the cutaneous portion of the artificial gullet caused troublesome irritation, and one female patient experienced serious difficulty owing to the onset of the vomiting of pregnancy ten years after the operation was performed.

JAMES B. HORGAN.