often be overlooked at first, owing to the excitement attendant on the birth of the child. The sound is continuous during waking and sleeping, is aggravated when the child is excited or exerts itself physically, and is quieter during sleep. In other words, anything which increases the force of the respiration augments the sound. The expiration is usually quiet, but when the stridor is very intense it may also be heard during expiration. The voice is in no way affected by the condition. The larynx moves up and down with the respiration, and supra- and infra-sternal retraction are often both present. In spite of this evident obstruction to the respiration, the infants do not appear distressed or uncomfortable. Temporary cyanosis sometimes occurs during the height of the stridor, but it is never continuous.

Under favorable conditions the general health and development are not interfered with, but the obstruction seems to render the children susceptible to pulmonary affections. Among the reported cases are several deaths from pneumonia, one from diphtheria and one from measles. Many cases of bronchitis have occurred. One of my cases died of pneumonia, and one had a bronchitis lasting several months.

Laryngoscopic examination in infants is very difficult and unsatisfactory; but, although the glottis cannot in my experience be made out in these cases, the deformity of the epiglottis can be readily seen and, in favorable cases, the approximation of the aryepiglottic folds also.

The stridor usually increases up to the third or fourth month, and remains the same until the child is about a year old. It then becomes gradually less noisy, disappears at first at intervals when the child is quiet or sleeping, and reappears during physical or mental excitement, and finally disappears altogether.

In one instance it lasted only one month (Cerf.). In another it persisted until the end of the third year (Lack).

DIAGNOSIS.

The diagnosis is based on the following distinctive features of this affection:

- (1) Its appearance at birth.
- (2) The limitation of the sound to inspiration.
- (3) The absence of continuous cyanosis.
- (4) The constancy of the sound independent of the position of the child.
- (5) The laryngoscopic appearance of the epiglottis and ary-epiglottic folds.

In laryngismus stridulosus, which is due to a true spasm of the glottis, we have a condition which begins some time after birth, usually about the period of dentition. The spasms occur in more or less severe paroxysms, with marked cyanosis, convulsions and actual cessation of respiration. The rachitic diathesis is almost invariably associated with it.

In stridor due to pressure on the trachea from an enlarged thymus or enlarged bronchial glands, the sound is not confined to inspiration, but is heard also in expiration. It is affected by the position, being louder when the child is on its back, since the pressure is thus increased. If the thymus is much hypertrophied it can be palpated just above

the sternal notch, and its boundaries made out by percussion.

Snoring due to adenoids can be easily excluded by examination. Their removal does away with whatever respiratory obstruction they may cause if present.

PROGNOSIS.

The prognosis is good. The condition itself is not a direct menace to health, but its presence adds to the danger of any disease of the respiratory tract. One death from laryngeal obstruction due simply to this affection is reported (Lack).

TREATMENT.

The treatment is purely prophylactic. It is of great importance that these infants should be properly nourished in order to combat the respiratory diseases to which they are susceptible. Intubation or tracheotomy may be required in very rare cases, but in the great majority there is no danger of asphyxiation, and operative interference is hardly to be thought of.

BIBLIOGRAPHY.

- Lees: *Transact. of the Path. Soc'y of London*, 1883, xxxiv, p. 19.
 Suckling: *Brit. Med. Journ.*, 1890, 1, p. 607.
 Lörl: *Allgem. Wien. Med. Zeit.*, Dec. 9, 1890.
 Robertson: *Journ. of Laryngol.*, London, October, 1891, No. 13.
 Thomson: *Edinburgh Med. Journ.*, September, 1892, p. 200.
 McBride: *Text-book*, Edinburgh, 1894.
 Refsum: *München. med. Woch.*, 1896, No. 48.
 Smith: *The Lancet*, May 25, 1897; June 8—March 19, 1898.
 Clarke: *The Lancet*, June, 1895, p. 1605.
 Sutherland and Lambert Lack: *The Lancet*, Sept. 11, 1897.
 Herzfeld: *Deutsch. med. Woch.*, 1898, No. 33.
 Variot: *Soc. Med. des Hôpît.*, May, 1898.
 Avellis: *München. med. Woch.*, 1898, No. 30 & 31.
 Hill: *Rev. Hebd. de Laryng. de Bordeaux*, 1899, vol. 11, p. 321.
 Stamm: *München. med. Woch.*, 1898, No. 38.
 Lambert Lack: *The Lancet*, 1898, p. 894.
 Variot & LeMare Hadour: *La Tribune Med.*, October, 1900.
 Thomson & Logan Turner: *Brit. Med. Journ.*, December, 1900.
 Guilbert: *Paris Thesis*, 1900.
 Bruder: *Paris Thesis*, 1901.
 Itocaz: *Congrès de Nantes*, Sept. 24, 1901.
 Cerf: *Archiv. de med. des Enfants*, December, 1901.
 Merklen & Devaux: *Gaz. des Hôpît.*, Paris, June 7, 1902.

AVULSION OF THE TIBIAL TUBERCLE OCCURRING IN A GIRL OF THIRTEEN.

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LESIONS of the tibial tubercle occurring in adolescence, judged by the literature on the subject, might be accounted rare, but careful study of knee-joint injury with the x-ray will undoubtedly make an exact diagnosis possible in many cases now dismissed as strains. The paper by Dr. R. B. Osgood in the *BOSTON MEDICAL AND SURGICAL JOURNAL* of Jan. 23, 1903, thoroughly covers all that we know about this condition and reviews in detail all reported cases. The number of cases reported, however, is so small that each new case is an interesting study, especially if it differs from those already on record. In all of the ten cases reported the lesion of the tubercle occurred in boys between the ages of thirteen and sixteen, and in all of these cases the boys are described as "active, athletic and well-developed muscularly." The case I wish to report is unique in the fact that it occurred in a girl of thirteen, but also "athletic and well-developed." The history of the case is typical, and

TIBIAL TUBERCLE -- DONOGHUE.

simply goes to show that with the increase in athletics and gymnastic work among young girls, we may expect to find in them the same forms of joint injury now seen in boys.

The history of the case is as follows: Jennie F., age thirteen, weight 80 lbs., height 5 feet 3 inches, came to the Boston Dispensary March 18, 1903, complaining of pain about knee and difficulty in walking. About five weeks before this time, while vaulting over a horse in the gymnasium, she fell, striking cushion with her knee. Following this there was pain and swelling, but it troubled her little except when trying to kneel. Mother painted with iodine and then applied a tight bandage. No other treatment until I saw her. Stiffness of the knee had increased, and she had more difficulty walking and more pain after standing for any length of time. The pain was always more or less localized at site of tibial tubercle when walking, but radiated up over knee when she was quiet. Examination showed a tender spot corresponding to an increased prominence at the site of the tubercle. No difference in the level could be detected between the patellæ. A provisional diagnosis of avulsion of the tubercle was made, which the x-ray confirmed.

Under treatment, by strapping, the leg became almost functionally perfect, and aside from slight pain on pressure, or when kneeling, she has recovered.

I am indebted to Dr. Gardner of the Boston Dispensary for the excellent pictures of the knee.

Medical Progress.

RECENT PROGRESS IN SURGERY.

BY HERBERT L. BURRELL, M.D., AND HAYWARD W. CUSHING, M.D.,
BOSTON.

(Continued from No. 22, page 530.)

SURGERY OF THE GALL BLADDER.

Dr. A. J. Ochsner,²⁶ in an article on "Surgery of the Gall-Bladder," gives the following conclusions:

(1) The diagnosis of disease of the gall bladder and of gallstones requires further study and observation.

(2) The classical symptoms must be supplemented in order to be sufficient as a basis for diagnosis.

(3) It is not wise to operate during the acute attack of cholecystitis.

(4) Patients much reduced by long-continued suffering do not bear well prolonged operations upon the gall bladder and ducts.

(5) Robson's observation that patients with carcinoma of intra-abdominal organs do not bear gall-bladder operations well has been borne out by my experience.

(6) If the operation cannot be postponed in presence of extreme jaundice, it should be confined to simple drainage of the gall bladder.

²⁶ *Annals of Surgery*, June, 1902.

SURGICAL TREATMENT OF PANCREATIC CYSTS.

"Cysts of the pancreas, while rarely encountered, are still the most common pathologic condition of this deep-seated organ that we are called upon to treat surgically," says A. Morgan Cartledge.²⁷ Since Gussenbauer, in 1882, first operated successfully by incision and drainage for pancreatic cysts, there have been collected by Körte and others about one hundred and twenty-one cases. Most operators have followed Gussenbauer; that is, incised the cyst, stitched to the parietal peritoneum and drained. According to Böckel, the cases so treated number one hundred and fifteen. This author also collected twenty-five cases where extirpation, either complete or partial, of the sac was practised, with four deaths. A comparison of these results, shown by the statistics, would seem to indicate that incision and drainage should be practised as a routine procedure in pancreatic cysts. It is a well-known fact that these accumulations, in and about the pancreas, do not pursue the same anatomical route in presenting toward the surface. This fact should have great weight in deciding for or against complete extirpation. Undoubtedly, evolution most often takes place below the stomach and above the transverse colon, the cyst carrying before it the gastocolic omentum. Cysts so presenting are best suited to extirpation, or, as the author prefers, enucleation. Probably the most frequent evolution of the cyst is above the stomach, or between the stomach and the liver. Such a cyst, if adherent at all, would present the gravest dangers in its enucleation. Can the manner or direction of the growth be ascertained with sufficient accuracy as to enable us to select a method procedure? Oftentimes the physical signs presented by the tumor will suggest this. The cyst which has evolved above the stomach is on a high plane, and much more fixed than below. Cysts presenting below the stomach tend to displace the pancreas downward by traction, and so induce a condition of otosis of this and surrounding organs. So great may this tendency be that acting in conjunction with deep inspiration on the part of the patient the operator may carry the cyst almost to the pelvic brim. Finally, the question may be settled by a sufficiently long incision in the abdominal wall as to permit of inspection. That extirpation is the best ideal operation, did safety permit, few would dispute who have had experience with incision and drainage. The latter is slow and disagreeable to a tantalizing extent, both for patient and surgeon.

A NEW OPERATIVE TECHNIQUE FOR HEMORRHOIDS.

J. Potarka²⁸ commends the method published by Versesco at the Thirteenth International Medical Congress, which, up to the present time, has attracted little attention. He describes it as follows: For special instruments are required a Whitehead speculum, a cork cylinder fitted with a wire handle 89 cm. in length and having a diameter of 3 to 3.5 cm., also "Karlöbader" needles. With the patient under general or spinal anesthesia and the sphincter ani dilated, the cork cylinder is inserted and the speculum withdrawn. The marginal zone of mucous

²⁷ *Med. News*, March 28, 1903, p. 602; *Am. Gyn.*, January, 1903.

²⁸ *Rev. de Chir.*, vol. xxi, No. 5.