

PERISCOPE.

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HYPERTROPHIC SCLEROSIS OF THE LIVER, WITH CHRONIC JAUNDICE.

UNDER this name Dr. Hanot describes (*Thèse de Paris*, 27 Décembre, 1875, No. 466) a new form of hepatic cirrhosis, characterised by—(1) marked extral-obular sclerosis without any tendency to contraction in the newly-formed connective tissue; (2) intra-lobular sclerosis (frequently); and (3) abnormal development and chronic catarrh of the biliary ducts. Clinically this affection is characterised by a chronic icterus, due to obliteration of the biliary ducts, and by considerable hypertrophy of the liver without ascites, and without abnormal development of the superficial abdominal veins, as seen in ordinary cirrhosis. In the majority of cases the disease, which is essentially one of slow progress, presents nothing special; sometimes, however, the sclerosis has appeared to be subordinate to alterations in the biliary canaliculi, either primary or consecutive to biliary lithiasis. If this fact was definitely established it would be expedient to contrast atrophic cirrhosis, which is developed around the radicles of the portal vein, with hypertrophic cirrhosis with icterus, having its points of departure from around the biliary ducts. As to treatment, Dr. Hanot has seemingly derived some advantage from the application of Vienna paste to the hepatic region.—*Bull. Gén. de Thérap.* 30 Mars, 1876.

ON THE INTRA-ARTICULAR PRESSURE OF THE KNEE-JOINT—TREATMENT OF JOINT DISEASE BY EXTENSION.

SOME interesting observations and experiments have, of late years, been made in reference to the intra-articular pressure of the knee-joint under different conditions, which have bearings of importance upon the physiology and pathology of that articulation, and may lead to practical suggestions of value. Amongst the most important are those of Bonnet, Reyher, and Ranke. The principal factors which these observers have taken into consideration, as modifying the above-mentioned pressure, are—1. The position of the limb; 2. The condition of the peri-articular muscles; 3. The amount of intra-articular effusion; and 4. The traction to which the limb has been subjected. The position of the maximum capacity of the joint, which, of course, corresponds to that of minimum pressure, is the subject of some difference of opinion. While Bonnet asserts it to be that of flexion of the leg at an angle of 60°, the other two observers reduce the angle to 30°. The explanation of the

discrepancy appears to be that Bonnet's observations were made upon dead bodies, in which the muscles were either removed or in the condition of complete relaxation which follows cadaveric rigidity; and that it is owing to the action of these (an element which he neglects to take into consideration) that the angle becomes changed. Ranke found that (taking the muscles into account) on starting with the attitude of complete extension, the pressure diminishes with the flexion of the leg, and attains its minimum at the angle named (30°). On further increasing the flexion the pressure increases rapidly, and becomes considerably greater than the primitive pressure corresponding to full extension, even before the leg has been flexed to a right angle. The contraction of the peri-articular muscles has considerable effect, according to the measurements of Ranke (*Centralbl. f. Chir.*, 1875), in augmenting and modifying the intra-articular pressure. Ranke was unable, from his observations, to establish any relation between the degree of pressure and the amount of intra-articular effusion; but, in individual cases, the law above-mentioned, as to the pressure in different attitudes of the limb, holds, whatever be the amount of effusion. The effect of permanent or continuous traction of the limb (as, *e.g.*, by a weight or elastic force) upon the intra-articular pressure is modified by the other factors. By the expedient of forcing needles into the condyloid extremity of the femur and into the head of the tibia, Reyher (*Deut. Zeitsch. f. Chir.*, 1873) has demonstrated ocularly that a moderate weight is capable of producing a veritable and measurable separation of the articular surfaces—a traction of 100 livres producing an elongation of 3.5 mm. He has further observed that, in cases where the quantity of synovia is normal or but very slightly augmented, the effect of continuous traction is to diminish the pressure within the joint. Paschen (*ibid*) has already made the same experiments and observations with reference to the hip-joint. The effect is the same if the muscles be relaxed or paralysed, whatever be the amount of effusion. But if the quantity of effusion be considerable and the muscles active, the effect of extension by weight will be an increase of the pressure. Some of the applications of these observations to clinical and practical surgery are sufficiently obvious. They illustrate the slightly flexed attitude which the limb tends to assume in acute synovitis; but, above all, they indicate the rational employment of continuous extension (“la methode de distraction,” as it is termed) in those cases (of preference) in which inflammatory affections of the joint are attended with *slight* synovial effusion. Reyher would not, however, entirely reject the treatment of acute synovitis with effusion by this method, but would advise aspiration of the joint as a rational preliminary measure, after which it may be adopted in accordance with the principles here laid down. Morosoff (*Centralbl. f. Chir.*, 1875) even goes so far as to assert that the light and uniform compression of the articular structures pro-

duced by traction in these last cases is useful. Another mechanical effect of traction upon the limb, and one which the last-mentioned observer more especially draws attention to in the case of the hip-joint, is of importance in reference to this plan of treatment—viz., the alteration of the points of contact of the articular surfaces, which, in the cases of both the hip and knee-joints, the different attitudes assumed by the limb under different degrees of force prove to take place. We may then enumerate these as amongst the various advantages claimed for the method of treatment of joint affections by extension:—The modification of the intra-articular pressure; the diminution of the contraction of the peri-articular muscles; the alteration of the points of contact of the articular surfaces; and, finally, the rest and immobilisation of the articulation.

T. E. L.

CAUSES OF APHONIA.

PORTER, in a concise and practical paper on "Aphonia, its Causes and Treatment" (*St. Louis Medical and Surgical Journal*, January and February, 1876), considers the causes of aphonia as affecting one of three factors in the formation of the voice. Those impairing the first element, the supply of air, are to be found in emphysema and the last stages of phthisis, where the aphonia is due to the small quantity and force of the air expelled from the lungs; and in a solution of continuity in the tracheal walls, as after tracheotomy or laryngotomy. The second set of causes, those which affect and change the vocal cords, may be due either to purely local lesions, acute and chronic inflammations and morbid growths, or to constitutional disease, phthisis, syphilis, and sometimes with the exanthemata. In phthisis, one-third of a given number will probably have laryngeal complication. Louis reports ulceration of the larynx in 63 cases, out of 193 of phthisis; Guy's Hospital, 47, out of 145. Flint states that 61 cases, out of the 670 on which his recent work is based, had laryngitis. The author himself reports 57 cases, out of 100 observed by him, and believes that the laryngeal disease is secondary to the pulmonary, and that it is rare to find the former without signs of the latter. Syphilitic affections of the larynx are also a common cause of aphonia. Durham gives 30 to 40 per cent. as the frequency with which laryngeal complications are met with in the out-patient syphilitic service at Guy's Hospital. Condylomata, as a cause of aphonia, are reported by Gerhardt and Roth in 8, out of 54 cases of syphilis. Mackenzie reports but 2 in 54 cases examined by him. Porter's experience seems to accord with that of the latter, and herein he agrees with the reporter (Dr. Lefferts), who believes that condylomata of the larynx are only infrequently met with, and that the peculiar voice of the disease is usually, as stated by Porter, due to the erythematous condition of the mucous membrane. The points in differential diagnosis between

phthisis, syphilis, and carcinoma, in the ulcerative process in the larynx, are so well given by the author, that we reproduce them in full:—In ulceration from syphilis, the mucous membrane of the palate is more liable to be first attacked, and afterward that of the epiglottis and surrounding folds. Infiltration and destruction of tissue go on rapidly and deeply, and the edges of the ulcers are red, thickened, and undermined. The thickening does not extend far beyond the margin of the ulceration, or in those parts not as yet invaded by ulceration, and is seldom extensive. The expectoration is thick, yellow, and accompanied by a putrid odour. In epithelioma, the ulceration is, as a rule, first seen outside the larynx, either on the edge of the epiglottis or on the membrane covering the outer surface of the arytenoid or cricoid cartilages, and rarely within the larynx. As the growth increases, marked and irregular thickening is seen around the ulcer, which presents a dirty-gray appearance, with raised edges. The progress of the disease is slow, but steady. In the early stage the expectoration is slight, but when the ulceration is at all extensive it becomes exaggerated and mixed with blood and pus. In phthisical ulceration, the first inroad is made in the mucous membrane over the upper and inner portions of the arytenoid cartilages, and on the ary-epiglottic folds. The epiglottis is not at first ulcerated, but is often thickened and dotted over with small patches of infiltration. The thickening is characteristic. The distinct outline of the arytenoid cartilages is lost; the ary-epiglottic folds look like large solid tumours, and the intra-arytenoid fold is often absorbed in the general thickening. The progress is slow, and, when any considerable surface is destroyed, the ulcer presents a ragged, worm-eaten appearance. There is more expectoration than in malignant disease, and it is more frothy and thinner than in ulceration from syphilis. Of the third and last class of causes of aphonia, those which impede the action of the muscles moving the cords, especially the abductors and tensors, the principal members are mechanical obstruction, either due to the results of the infiltration of the muscular tissue with phthisical, syphilitic, or other deposits, to a growth preventing the movements of the muscles; to a thickening of the mucous membrane from chronic inflammation, and the presence of foreign bodies; also to bilateral and unilateral paralysis of these muscles; and, possibly, a reflex nerve-action from irritation elsewhere, as in granular pharyngitis.—*N. Y. Med. Jour.*, May.

TREATMENT OF PERTUSSIS.

At a recent meeting of the Neurological Society of New York, Dr. S. D. Powell read a paper entitled "A Contribution to the Pathology and Treatment of Pertussis," in which he advocated, as a curative measure, a single complete etherisation of the patient, extending over a period of from thirty to fifty minutes. He hit upon this plan accidentally, as he

found to his surprise that a child suffering from whooping-cough, who was thus etherised for the reduction and dressing of a fracture, did not whoop any more afterwards. In this case the patient was kept under the influence of the anæsthetic for about fifty minutes. Dr. Powell related six cases altogether treated by this method, and hoped that it would be given a more extended trial by the gentlemen present and the profession at large. In two of his cases the paroxysmal stage of the disease had lasted three or four weeks at the time the ether was tried, and in the others was of longer standing. In one or two of them it was necessary to repeat the inhalation a second time, though not to keep the anæsthetic up for so long as at the first. Dr. B. F. Dawson thought that the ether inhalation had been tried in too late a stage of most of the cases, as well as in too small a number, to establish its efficacy; but considered the method eminently worthy a further trial. In the discussion upon this paper, Dr. Allyn observed that possibly the effect of the ether-inhalation might be explained on the ground of the profound impression or shock on the system caused by it, just as whooping-cough had been known to be suddenly checked by a severe and sudden fright.—*Philadelphia Med. Times*.

SALICIN A SUBSTITUTE FOR SALICYLIC ACID.

A RECENT communication by Dr. Maclagan (*Lancet*, 11th March, 1876), giving favourable results which followed the administration of salicin in acute arthritic rheumatism, induced H. Senator (*Centralblatt*, No. 14, April 1st, 1876) to publish the following as bearing upon the therapeutic use of salicin:—Maclagan was led to the employment of this drug in rheumatism by reflecting on the connexion that disease has with intermittent malarial diseases. The justice and correctness of this view, however it may be acknowledged with regard to quinine as a specific against malaria, must remain undecided, for it was known to Maclagan that quinine, like so many other remedies, has already been frequently employed in acute arthritic rheumatism with very variable results. Still the credit is his for having been the first to call public attention to the long-forgotten salicin. For several months back, as soon as Dr. Senator was convinced of the therapeutic results of salicylic acid administered internally, he has been engaged in trials with salicin, having been instigated to it by a very different line of thought, but, as he believes, one more trustworthy than that of Dr. Maclagan. There can be no doubt that salicylic acid exercises its therapeutic influence shortly after its introduction into the blood; and further, the researches of Ranke, Lehmann, Laveran, and Millon, have shown that salicin, when introduced into the blood of the human or other animal organisation, directly or by the stomach, is either completely or in greater part converted into salicylic acid. It therefore occurred to Dr. Senator to practically

utilise this interesting theoretical discovery for the purposes of therapeutics, and to allow the diseased body to prepare for itself the means of cure, from which, *in statu nascenti*, perhaps still better results might be expected to follow, than when it has to make its entrance by the alimentary canal. According to Senator's observations up to the present, the following are the well-pronounced results:—Salicin administered in doses of 2, 5, or 6 grammes lowers the temperature in fevers and febrile conditions quite as effectually as salicylic acid. The diseases in which he had as yet employed it were parametritis, typhus abdominalis (enteric), and phthisis pulmonalis. The effect of salicin on arthritic rheumatism he had not been able to try up to the present, inasmuch as his first stock of salicin, which for a long time back was not officinal, and hence was to be had in but small quantities, was used up in investigations made on patients suffering from other diseases, as well as on healthy individuals; and then when the specific action of salicylic acid in that particular disease was known, curiously enough, almost immediately arthritic rheumatism became very scarce in Berlin, so that he had not had any fresh case in his wards in which to try its effects. But after the observations made by MacLagan, it is not too much to expect that salicin partakes of the same efficacy as salicylic acid. Salicin has none of those unpleasant after-effects (scratching, choking, &c.) which salicylic acid has; it tastes bitter, can be given as a powder rubbed up with sugar, or still better in wafer, or pills, or even in solution. Its price even now, when there is so little call for it, is nevertheless somewhat cheaper than that of salicylic acid and its salts. As it can be very readily obtained from the willow and the poplar, there is no doubt that, by a more general call for it, it would be far cheaper than salicylic acid is ever likely to be. Salicin, however, cannot take the place of salicylic acid, either as an antiseptic agent or for external applications, as has been demonstrated by Kölbe.

J. M. F.

FŒTAL DIAGNOSIS.

DR. FRANK WILSON reports an analysis of a second series of one hundred and six cases. Of those whose hearts beat from 110 to 125, there were thirty-five males and two females; from 125 to 130, thirteen males and two females; from 130 to 134, eight males and four females; from 134 to 138, five females and two males; from 138 to 143, seven females and two males; from 143 to 170, twenty-four females and two males. Thus it would seem that at least a shrewd guess might be made as to the sex of the child.—*American Practitioner*.

S. W.

its living condition, from the contrast of colour and the sudden projection of the border, would have recognised that it was the edging of an ulcer in a position high enough to come into sight, projecting into the pharynx through its lowest opening. Satisfied with this diagnosis, I made no attempt to interfere with the tumour. The case progressed—as it was inevitable that such a miserable one should—to a fatal issue. There was no intra-thoracic disease, and but a slight amount of stridor. After two days' occupation of her bed she died almost quite suddenly in the end of December, apparently of simple asthenia. The only parts of the body that I was able to examine, *post mortem*, are these I have here—the pharynx, larynx, thyroid gland, with the cervical parts of the trachea and œsophagus. The trivial disease of the thyroid gland may, as I have already pointed out, be dismissed as taking no share in the fatal disease, although it is easy to understand how it formed the basis of the latter in the patient's mind. The epithelioma of the œsophagus involves the entire circumference of its first portion, and measures, about an inch and a half in the length of the tube, its upper margin passing into the pharynx, where the characteristic raised and everted border came within the range of the laryngoscope. The surface of the ulcer is not eroded, as in Dr. Franks' case; on the contrary, it is, in great measure, covered with a whitish fissured outgrowth, which opens like the pile of coarse velvet as the tube is laid flat, and its tissue breaks and crumbles readily with any handling. In fact, it behaves so as to be aptly described by the term applied to this disease by Cruveilhier, "fragile cancer." The microscopic examination proves it to be an epithelioma, and different, as it appears at first sight to be, from that exhibited by Dr. Franks, I can find no difference of importance in the microscopic characters of the disease in the two cases. These cases differ then only in the amount of destruction and loss of the diseased tissue, and of the parts involved by it, and in the clinical details.

From the contrast my case presents to the other in the mode of death of the patient, and in the fact that the disease was capable of being diagnosed during life by a laryngeal examination, I thought the case worthy of being laid before the Society.—*January 29, 1876.*

PREVENTIVE TREATMENT OF BOILS.

DR. L. DUNCAN BULKLEY, the well-known dermatologist of New York, says that the hyposulphite of soda, given internally in doses of thirty grains, three or four times daily, largely diluted and on an empty stomach, is his main reliance in checking the new formation of boils. Sometimes this fails, in which case he recommends large and repeated doses of quinia.—*American Practitioner*, May.

taken set in, and she became intensely narcotised. I obtained the aid of a *confrère*, and, as may be supposed, spent a very anxious twelve hours, during which time I frequently thought she would have succumbed to the influence of the narcotic; but by steady perseverance—administering enemata of brandy and milk and beef essence, brandy and water by mouth, mustard plasters to neck and between the shoulders, and eight subcutaneous injections, each containing $\frac{1}{60}$ gr. of sulphate of atropia—she came round well, woke up and took nourishment freely, but, sad to say, the intense suffering again set in. On awakening the bowels were copiously relieved of dark, bilious, fæculent discharges. Poultices were applied to the region of the liver; pills of hydrarg. c. cretâ and Dover's powder, with a mixture of nitro-muriatic acid, taraxacum, and Hoffman's ether, prescribed. Meteorism, however, set in, and all the other symptoms of intense peritonitis, terminating with black vomit, and death on the evening of the 12th.

I feel satisfied that had there been a *post mortem* examination something like what was found in the former case would have presented itself. It was untoward that the morphia should have acted so powerfully, yet with such intense agony before me the dose does not appear too large. She took altogether equal to $1\frac{1}{2}$ grs. of morphia— $\frac{2}{3}$ of the muriate by mouth, and $\frac{1}{3}$ of the acetate by subcutaneous injections. When I remember that in the first case a grain of opium was taken for days every four hours, and the enormous doses of opium given in cases of peritonitis, hernia, &c., it occurs to me that during great pain opium is not rapidly absorbed when taken into the stomach, but that given subcutaneously it passes at once into the circulation, and the accumulative action becomes more probable.

It is, therefore, a lesson for the future to be more guarded in the administration of morphia in large doses by that method.

METHOD OF DIAGNOSING REAL FROM APPARENT DEATH.

MONTEVERDI (of Cremona) adds another to the already long list of methods, all more or less equivocal, for deciding between real and apparent death. He recommends a hypodermic injection of strong liquor ammonia in all cases where the least doubt may exist. During life such an injection produces a tolerably extensive erysipelatous-looking red patch. At its worst, this patch is oval, not exceeding 5-7 centimetres in extent, of a red colour, and accompanied by a slight serous exudation, which raises up the epidermis. If the injection be used after death, the spot where it is applied no longer shows this red coloration; its tint resembles that of dirty skin, though its dimensions are the same as in the *pre-mortem* injection.—*Archiv. di Medicina e Chirurgia di Roma*.

K. M. F.