

blade that its upper half was bent inwards at a right angle. Not willing that the fine ten-pound girl should live in that plight, I tried various forcible manipulations of the forehead and was finally rewarded by the bent bones snapping back into shape. No trouble has since developed in the child.

CASE IX. Version.

Mrs. D. H., a primipara, thirty years old, after being in labor twenty hours, on May 26, 1894, had only progressed so far as the dilatation of the os to the size of a silver dollar. The edges were thin. A soft mass presented, which I thought was either a buttock or a placenta previa. On etherizing and examining with the whole hand, I found a head presenting in O. R. P., and made up of countless small bones, so soft and shapeless that I could not rotate it. Very foolishly I tried to apply forceps, one blade over the face, the other over the occiput. But I could not engage it, and so did podalic version, without much difficulty. The boy weighed eight pounds and did well, although his head was merely a bag made up of bone scraps. The mother's perineum was torn through the sphincter ani, but the silk sutures held well and she made a perfect recovery.

CASE X. Pulmonary embolism. Death.

Mrs. K. L. G., a primipara, twenty-seven years old, was a perfectly healthy woman. Her labor, on July 21, 1894, was perfectly normal, lasting only eleven hours, except that during the second stage she breathed very rapidly and seemed to depend upon being fanned. However, as her pains came rapidly and as she was making tremendous muscular exertions, it did not seem much amiss. The day was intensely hot. She had been inhaling for relief a mixture of ethyl bromide, chloroform and alcohol, which I have employed in several hundred cases and continue to use. As her labor drew to its close she declined further use of the anesthetic, and at the very last her difficulty in breathing became very pronounced. A moderate hemorrhage followed the delivery of the seven-pound girl. The mother's breathing became steadily worse. She began coughing up great quantities of froth. Râles were to be found all over the chest. Morphia and strychnia were given in full doses hypodermically. She became more and more frightened, as did I. Her heart was normal. The right lung gradually ceased to work, and she died in twenty-four hours.

OTHEMATOMA, WITH REPORT OF A CASE.

BY GEO. A. WEBSTER, M.D.,

Aurist to St. Elizabeth's Hospital, Assistant Aurist to Carney Hospital.

Synonyms. — Hematoma auris, blood tumor of the ear, insane ear, asylum ear.

Symptoms. — We have a tumor of the auricle developed in a few hours or days. Its location is usually on the anterior surface of the auricle. Cases have been noted where it occurred on the posterior surface (6, p. 164). It is most often in the upper part of the auricle, but may invade any part, even the tragus or lobule. The last is a very uncommon site. Randall, however, reports a case (15) of bilateral hematoma following traction on the ear-rings in a girl of fifteen years. Here the swelling was chiefly in the lobule, though extending to the lower end of the cartilage.

The size of these hematoma is variable, but the spontaneous variety, as a rule, are smaller (7, p. 203). The largest may reach the size of a hen's egg. Then all the normal irregularities of surface disappear and we have a smooth, rounded outline (10, p. 14).

The color of the tumor varies in different cases. It has been stated to be livid red or dark purple (2), bluish-red (7, p. 203), the color of the normal skin or even paler (4).

The spontaneous cases may be without subjective symptoms (7, p. 204). The traumatic cases are likely to have considerable inflammatory reaction (18, p. 444), and, as might be expected, are more apt to be associated with pain. We may have heat, tingling and a feeling of tension (6, p. 164). There may be fluctuation, but it is not present in all cases. Impaired hearing or subjective noises do not result unless we have at the same time injury to the middle or internal ear, or occlusion of the meatus by the swelling.

Cause. — Othematoma are usually traumatic in origin, although cases occur where no history of traumatism can be obtained. Fraukel (17, p. 303) and others believe all cases to be traumatic.

The frequency of this affection among the insane has led many to consider this class of cases idiopathic. The fact that Dr. Brown-Séquard was able to experimentally produce hematoma of the auricle in rabbits by irritation of the restiform body (3) gives added weight to this theory. Politzer refers to a case (7, p. 203) of left othematoma where the right ear showed thickened cartilage in a corresponding area, suggesting tissue change as a cause.

Traumatism is a cause, either by traction or bruising. Prize-fighters, boxers and football-players furnish good examples of the traumatic origin. This deformity of boxers was recognized and considered so characteristic by ancient sculptors that it has been reproduced in works of art. An illustration may be seen at the Vatican in the pugilists of Canova (8).

Hematoma of the auricle is a not uncommon occurrence among football-players. It is, indeed, so common that many adopt preventive measures, as will be described later. Southam (11) says that this ear in football-players is most frequently due, not to a blow, but to violent friction applied to the ear when the blood-vessels of the head are distended. This occurs in what he calls "a tight scrimmage," where a mass of men with their heads down are struggling for the ball. Among American football-players it is most apt to occur, Dr. W. M. Conant tells me, when one side are trying to force the ball through the line of their opponents. And it has been found that the men receive this injury less frequently in getting through the line with the head down and forward than when it is held up and back.

Othematoma may occur at almost any age. A case has been reported in a baby of fifteen months.

Atheromatous disease of the blood-vessels is also a cause (6, p. 163).

Politzer refers to a case (7, p. 202) where the cause was prolonged contact with a cold pane of glass. Cold is mentioned by others as causative.

We may be able to get evidence of no greater injury than the slight pressure of sleeping on the affected ear.

Congestion of the cerebral vessels may be causative. Cases not infrequently occur where no evident cause can be discerned, and which must for the pres-

ent be called idiopathic. Of 27 cases referred to by Politzer (7, p. 203), 21 were traumatic in origin and six idiopathic. Parant records a case (16) where the insane patient beat his head against the wall with such force that the left auricle became ecchymotic, and yet no tumor developed; so that traumatism and insanity together may fail of producing hematoma. The general term insanity is, however, far too broad for scientific discussion, and this phase of insanity can be more intelligently presented by the specialist in mental disease.

Pathology.—We have an effusion of blood into the tissues of the auricle. As shown by experiments on rabbits, the effusion in traumatic cases, is either between the cartilage and the perichondrium, or between the perichondrium and the skin (17, p. 303). Buck (2) states that it may be in the cartilage.

In some cases we have softening and degeneration of the cartilage in one or more spots. Here a reparatory process sets in by the sending out of granulations from the perichondrium into the softened tissue. These, like all granulations, have thin-walled blood-vessels which easily rupture, resulting in effusion of blood into the tissues. In traumatic cases we have more or less inflammation of the cartilage (18, p. 445) and of the perichondrium. If we have suppuration or necrosis of the cartilage, a considerable loss of tissue may result with subsequent deformity. Then we have a shrivelled or contracted auricle. On the other hand, blood-clot may become organized, leaving permanent thickening.

In traumatic cases the left ear is most frequently affected. This might be explained among boxers by the fact that this ear is most exposed to right-hand blows of assault. Many other traumatic cases would arise in this way. Of 19 cases referred to by Politzer (7, p. 203), 13 were left-sided. Of these, 11 resulted from a blow with the hand or fist.

In some cases of hematoma, calcification may result (6, p. 165). Hematoma of the auricle has been reported in a cat's ear, presumably as a result of violence, by Campbell (12, p. 55), Tomkins (13, p. 187) and by Eager (14, p. 648).

Prognosis.—When untreated, hematoma may be absorbed, may be ruptured, may suppurate or may become organized. In some cases considerable deformity (4) of the auricle may follow, and the patient should be warned accordingly.

Field says (3): "In my experience the results of treatment of whatever kind, are in the majority of cases disappointing. A shrunken, though thickened ear often remains; the deformity due to cicatrization is, however, more marked after organization of a clot."

Southam (11, p. 1277) also emphasizes the last statement. He thinks, moreover, that if we incise and suppuration follows, the deformity will be greater.

Hun, writing in 1870 (10, p. 23), when suppuration was a common event in these cases, believed that those cases which ruptured or were opened artificially, had far greater deformity than those which were absorbed.

To-day, however, I believe that, provided asepsis is maintained, the least deformity results when the contents are promptly removed, excepting, perhaps, the mild cases which easily disappear with pressure.

In football-players the prognosis is distinctly less favorable if they continue to play and pay no attention to the ear (11, p. 1277). The swelling is then likely to increase and it may rupture.

The prognosis is more favorable in the traumatic than in the idiopathic cases, except where there is a deep-seated lesion of the cartilage (7, p. 204).

The prognosis for the insanity in cases where hematoma are found, is generally considered to be bad. Campbell has, however, seen several cases of recovery from insanity where the patients have had this condition present (12, p. 55).

Prevention.—The frequency of this affection among football-players has led some of the English athletes to wear a tight-fitting cap with flaps for protecting the ears in playing (11). In this country a similar device has been used, and also a wide band bound about the head so as to inclose the upper part of the auricles. The majority of players, however, do not adopt preventive measures, except to prevent recurrence, after having been once injured.

Treatment.—Opinions differ in regard to this. Gruber advocates aspiration if the contents are fluid, and incision if coagulated blood be present (18, p. 445).

Dr. W. M. Conant, who has been associated with football-players for eight years and who speaks from an observation of at least 25 traumatic cases occurring among them, states that he believes the best results are to be obtained by immediate aspiration, with incision if necessary to evacuate the contents, followed by pressure to prevent recurrence; that the contents when not removed are apt to become organized and leave greater deformity; that when cases have been seen early and at once evacuated, the subsequent deformity has been slight; that he has never seen perichondritis result from aspiration or incision; that proper protection to the ear in playing will very materially lessen the number of cases.

Dr. C. A. Porter, who has seen a number of traumatic cases among football men, states that it has been his custom to aspirate at once and repeatedly if necessary; that this method of treatment speedily relieves the pain; that the results have been satisfactory; that no harm has resulted from aspiration.

Aspiration should be followed by pressure to prevent recurrence. Pressure is best applied by a pad over the auricle held in place by a band around the head and forehead. When the hematoma is incised the line of incision should be so made, if possible, that the scar will come under the border of the helix.

After incision Dench (4) recommends packing the cavity with iodoform gauze so that it will heal from the bottom. He also suggests that the deformity will be less if we make an incision anteriorly to evacuate the contents and then at the lowest point cut through the cartilage and skin to the posterior surface of the ear. We may then suture anteriorly and allow the incision to heal by first intention, keeping the posterior wound open for drainage until the cavity is obliterated. Dench also recommends curetting after incision in cases where there is degeneration of cartilage.

According to Politzer (7, p. 205), if the pain continues after four or five days without decrease in the swelling, we have the indications for opening the tumor and removing the contents.

In traumatic cases it has been proposed to tie the posterior auricular artery and shut off a chief source of blood supply (10, p. 27), but the results of such treatment are not recorded.

Asepsis is, of course, essential throughout the oper-

ative treatment if we wish for satisfactory results. If we fail in this, perichondritis is quite apt to make convalescence very long and unpleasant. To prevent any possibility of this, some of our best aurists prefer to give other measures a thorough trial before operating. Their position is supported by Frankel's experiments on rabbits (17, p. 304), which showed no more speedy cure by operative than by expectant treatment, and he therefore recommends the simpler.

Grove (9, p. 210), while he has seen bad results follow in untreated cases, has seen excellent results follow the passive as well as the active or surgical treatment.

In traumatic cases, cold applications used immediately may help to limit the effusion. As soon as possible, however, the auricle should be put under firm pressure by means of compress and the roller bandage. Massage is also recommended as a valuable method of treatment. We are advised by Politzer (7, p. 205), however, not to try this till the third or fourth week.

REPORT OF A CASE.

On December 26, 1895, I was consulted by Mr. A, a man forty years of age, concerning a swelling of his left auricle. He had observed it a few days preceding this. It caused him no discomfort, but he objected to the deformity. Examination showed a small tumor, the size of a hazel-nut, on the upper anterior surface of the auricle. It involved the helix, the fossa of the helix and the antihelix. The skin over it was normal in color. Fluctuation was present. I was unable to find any cause, except that he stated that at times when he had slept so that the ear was pressed against the pillow, there would be a feeling of numbness in the morning.

I made a small incision to remove the fluid. It was hardly more than an aspiration. The fluid was apparently serum slightly stained with blood. The auricle after removal was very nearly normal.

As the patient objected to any conspicuous dressing, nothing was used to give pressure but contractile collodion. This did not prevent recurrence. I therefore determined to follow the method suggested by Dench, as the most speedy and radical.

On January 9th, I made an incision anteriorly along the line of the fossa of the helix, evacuating a fluid similar to that previously removed. This showed the effusion to lie between the cartilage and the perichondrium. The cartilage was smooth, yellow and shining, and showed no evidence of necrosis. An incision was made through the cartilage and skin to the posterior surface of the auricle. The anterior wound was sutured. The posterior opening was packed with gauze. The ear was covered with a layer of gauze held on by a cotton collodion dressing.

January 11th. The anterior incision was healed by first intention. The posterior opening was dressed daily till January 17th. It had then closed. The auricle was then slightly thickened. This thickness gradually disappeared.

June. There has been no recurrence. There is no deformity, although the line of incision anteriorly can be seen on careful inspection in the fossa of the helix.

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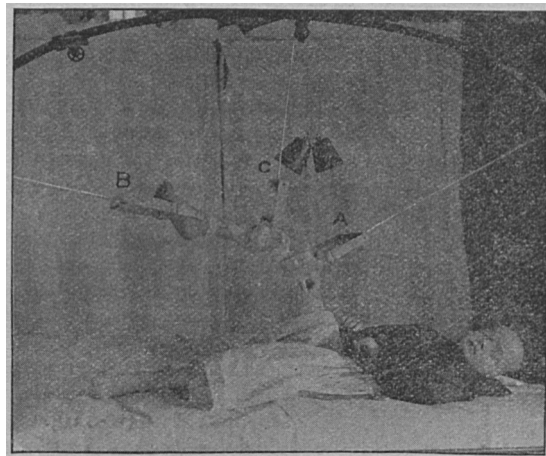
A METHOD FOR THE GRADUAL REDUCTION OF FLEXION AND SUBLUXATION OF THE KNEE.

BY ERNEST B. YOUNG, M.D., BOSTON.

THE following method has been devised by the writer for the gradual reduction of flexion of the knee combined with subluxation of the head of the tibia — a common result of tumor albus.

As far as can be ascertained, gradual reduction of this deformity, according to the principles of the genuclast, has never been attempted except in the cases mentioned in this article.

The method is simple, and can be successfully carried out by any one understanding the principles involved; whereas the use of the genuclast, for forcible reduction, requires considerable skill and judgment.



The accompanying illustrations show the apparatus used for this purpose at the hospital. The iron arch with movable pulleys is not at all essential, as a piece of light scantling supported by an upright at each end answers the purpose equally well; small galvanized iron pulleys being tied to this wherever desired. The uprights should be firmly fastened to the bed. The child is kept in position by being strapped to one of the frames used in the recumbency treatment of caries of the spine.

Thickly padded pieces of tin, three inches wide and curved to fit the leg, are attached at the points where the traction straps exert pressure. The traction straps are best made of adhesive-plaster strips, the ends of which are folded upon themselves to prevent their