

fiery local, and in no way connected with constitutional influences. Admitting that irritation, or inflammation in one portion of the jaw, may stimulate to a greater degree of activity the absorbents in a neighbouring part, and we at once remove the stumbling-block over which nearly all former theories have fallen.

In the shedding of the temporary teeth, absorption is always the result of irritation produced as a general thing by the pushing forward of the tooth of replacement, though we have abundant evidence that it may be the result of causes more remote. In alveolar abscess, the absorption of this process is the effect of irritation produced by the death of the nervous pulp. In regulating the teeth of children, the absorption of the alveolus, is the result of pressure upon its periosteum.

The irritation produced by salivary calculus, badly constructed artificial teeth, etc., frequently causes absorption of the gums and jaw, to such an extent that the teeth fall out; and in all these cases the appearance of the alveolo-dental periosteum is the same, that is, it becomes thickened and more vascular.

Montreal, April 25, 1847.

ART. VII.—CASE OF GUNSHOT WOUND AND EXCISION OF THE HEAD OF THE HUMERUS.

By THOMAS STRATTON, M. D., Edin.,

Lic. Royal Coll. Surg. of Edin., Surgeon R. N. and Member of Toronto Medico-Chirurg. Society.

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On the 10th of August, 1844, Xavier Hebinks, aged sixty, one of Aisance's tribe of Chippewa Indians, was wounded in the left arm by a gun heavily loaded with duck-shot, which went off accidentally, he being at the time about six feet from its muzzle. He lives on Beau Soleil Island, eight miles from Penetanguishene, and the weather being too stormy for a canoe, it was some days before they could bring him to me, when he was seen by Dr. P. Nicolson, Army Medical Staff, and Mr. P. Darling, from Manatoulin.

August 16. At first sight the wound appears to extend along the outer side of the arm, from the shoulder to the elbow; but on re-applying a flap two inches long at its lower extremity, the wound is reduced to four and a half square inches. In the upper half of the arm, the soft parts are much injured, part of them seems to have been shot away, and in the margin of the wound there are several shot holes in the integuments; two inches of the shaft of the humerus is destroyed; there is a thin glairy discharge from the upper part of the wound, there is but little constitutional disturbance, the skin is cool, the tongue moist, and the appetite moderate. A part of

the shaft of the humerus two inches long, and some other loose pieces of bone were removed, and also a quantity of moss which the Indians had applied to stop the bleeding, which they say was not great at the time of the accident. To take castor oil, and a cloth dipt in cold water to be applied over the wound.

17th. Accompanied by Dr. Nicolson, I proceeded to remove the head of the humerus. The patient was laid on a table, with his left shoulder projecting over its edge. Of the lower part of the humerus, the projecting extremity had been broken very obliquely, and on bending the arm at the wound, the sharp and almost pointed end I removed partly with a saw, and then with the nippers. I then took hold of the lower extremity of the upper part of the humerus, and with a small double-edged scalpel, cut along it upwards towards its head, from the side of which a small splinter was removed. The head I then turned out of the socket by using the scalpel around it, and turning the other end towards the chest; the part thus removed measured two inches; no vessels required to be tied. Search was made in the soft parts for any pieces of bone that might have been driven in by the shot; lint wet with water was for the day put in the socket, the soft parts were adjusted so as to make the breach as small as possible. With a sling the elbow was raised up so as to aid nature in shortening the arm, in order that the loss of bone might be less felt; a single turn of a bandage confined the arm to the side, and a cloth dipt in cold water was applied over the wound.

18th. Slept well, skin cool, some thirst; the lint is removed from the socket, and thin rags dipt in water are applied over the wound, which is five inches long, two and a half inches broad at its lower, and four and a half at its upper extremity.

30th. He continues to go on well, no pain except when moved; the wound is smaller, the end of the remaining part of the humerus is not now visible, nor is the glenoid cavity. Cloth dipt in a solution of the sulphate of zinc (a few grains to an ounce of water) to be applied to the wound.

Sept. 17. It is a month since the operation; he sat up in bed to-day, for the first time; there is great discharge, the wound is smaller. The fore-arm to be bent and extended on the humerus once daily, and the wrist joint to be exercised daily for a minute or two to prevent stiffness from non-use. Pieces of bone came away on September 18, October 15, October 23, and November 30.

Dec. 7. The wound is now closed, 112 days after the operation. He moves the left elbow forwards and backwards as freely and as far as before, and elevates it to within an inch as high as he can raise the right