

A trouble frequently encountered, and one which, undistinguished, proves confusing and deceptive, consists in the grasping of the sequestrum, when extensive, by lateral overlying tissues,—not new bone, but indurated soft parts. The writer recalls a case which he once had under treatment, where, the dead bone being thus held, a practitioner had been waiting for the separation a period of over two years, being deceived entirely as to the relation of the part. To satisfy one's self as to the condition, pass a small hook under the bone, and lift: if it yield, the sequestrum is only thus held, and is with safety to be pulled through; if, on the contrary, it be firm and unyielding, it is to be let alone,—separation not yet having occurred.

In the reproduction of new bone, which, at the period for the removal of the old, should be found to have obtained such character as to keep up perfectly the shape of the parts, the observer will be struck with the excess deposited along the middle line of the mouth; it seems, oftentimes, as if the floor was a mass of bone,—which, indeed, it really is. It is not found necessary, however, to do anything with this excess, nature taking all proper care of it.

Phosphor-necrosis attacking the upper jaw seems not so much to be dreaded as that associated with the lower. It is seldom so formidable in its nature or so destructive in its progress, the disease in these parts being sometimes found to run its whole course with an entire absence of acute action. A portion of bone dies, and the surrounding soft parts seem utterly indifferent. One would scarcely know anything abnormal was going on, were it not for the indication given in the loosening of the teeth; these drop out somewhat as they would out of a dried skull, while the soft parts eventually present the appearance of shrinking away from the bone, which structure becomes fully exposed,—as dry and lifeless, apparently, as a portion of dead wood. This, however, is, of course, not the common history. The inflammatory action is of the same type as that associated with the disease in the lower jaw, but more limited in extent and consequence, and much more susceptible to remedial measures. A bad feature consists in a marked tendency to recurrence of the trouble; but this, perhaps, will mostly be found within the control of the surgeon. The removal of a sequestrum here is a trifling matter, comparatively little effort allowing the piece to pass. If the bone seem grasped by the contracting soft tissue, the easiest plan of removal is found in the introduction between the parts of pellets of cotton: these quickly swell, and thus effect loosening.

At a Medical Congress in Zurich, Switzerland, Professor Billroth, in citing his experience with phosphor-necrosis, remarked that in attacking the upper jaw it seemed to act with greater and more destructive force, and was more unmanageable.

The author does not know how to reconcile this difference in clinical observation, unless an explanation is to be found in an implied greater tendency to return which exists on the part of the disease when situated in the upper

jaw. In the lower jaw, the full part that is to die seems impressed from the beginning,—that is to say, a certain portion seems predestined, and it dies in defiance of all surgery can do. Not that the evidence of the disease is general over all the involved part from the beginning: on the contrary, the incipient stage is markedly localized; but then, day by day, and week by week, the trouble is likely to extend over the apparently predetermined or preimpressed part. When the death occurs, it is a single death; and when the piece is cast off, there is not apt to be any renewal of the trouble. The sequestrum of the upper jaw, on the contrary, is generally small, some portion, most likely, of the alveolar process; but unless the treatment is of a most supporting and specific kind, it is apt to repeat itself again and again; but your treatment is responded to here, and for this reason, with care and attention, the extent of destruction is comparatively under control. If it be found more unmanageable in Zurich, then the means would not seem to be so well adapted to the end as those here employed, otherwise the circumstances must be different.

Again, at the same Congress resections are strongly commended. To be so indorsed, they must, of course, have been found to answer a good purpose. The patients who have their jaws resected for phosphor-necrosis in this country generally die, or, if happily they escape death, they do not find their disease cured without an inflammatory sequestrum at last.

The picture (Fig. 507), taken from life, represents a patient as he appeared with the disease five months in progress. At the end of eight months the writer removed the jaw at the articulation: the loss was very fully repaired at the date of operation, the parts having excellent motion.

An important objection to the operation of resection, even were the question of life not involved, is the great resulting deformity. Let nature take her course, and of such deformity there may be little or none. A late patient was a gentleman for whom the author removed—or rather from whose mouth nature cast out—the whole body of the inferior maxilla, and no one might tell whether it had been a case of necrosis or of simple extraction of all the inferior teeth, with the consequent alveolar absorption, so perfect has been the repair in accordance with the destruction. The objection that this new bone keeps up the trouble, by becoming involved in the diseased action, is not according to the experience of the writer. If it become implicated it would seem to imply that it has not

FIG. 507.—APPEARANCE OF PATIENT WITH PHOSPHOR-NECROSIS.



been properly cared for. Careful and properly repeated syringings with water medicated with iodine or capsicum will protect it. This experience does not, however, include the isolated osteophytes; these do without doubt incline to degeneration and decomposition, but by care the many may be stimulated to a self-supporting combination to which the periosteum becomes what it was to the bone exfoliated.

It is certainly most unfortunate that in the case of the upper jaw no osseous repair seems attempted, but it is not the experience of the author that the horrible deformities mentioned by various writers are at all common. Local and systemic stimulation combined with a tonic treatment insures more or less attempt at supporting the surrounding parts by an exudate which assumes a fibro-cartilaginous aspect, and which takes on itself the duties of the structure lost, to very good purpose.

In loss of structure in the lower jaw the most vigorous efforts are seen to exist on the part of the periosteum almost from the beginning to reproduce the impressed part, disproving to such extent, as it would seem, the deduction of Dr. Geist, that the phosphorostitis is secondary to periostitis, for assuredly is it the case that under no circumstances of excitation does that tissue exhibit higher vitality. That this secondary deposit differs from the original bone, in possessing an excess of organic structure, implies perhaps only that the deficiency in inorganic substance has its explanation in the presence of the corroding acid of the disease. That the capsule of new bone is so frequently found to atrophy may have similar explanation with the primary osteophytic degenerations, requiring, if not a local, yet a constitutional care. A suggestion made by Mr. Salter that the new bone be supplied with function by using it as soon as possible as a base for artificial teeth may be found to have in it much practical import.

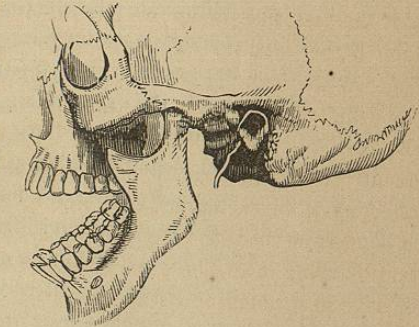
CHAPTER LIII.

DISLOCATION OF THE INFERIOR MAXILLA.

THE frequency of this accident, the terror it excites, and the harm resulting when it is not properly cared for, give an importance that renders appreciation of the subject a matter of necessity.

There are four forms of submaxillary displacement: complete dislocation, incomplete, bilateral, and unilateral. In the first of these, one or both condyloid processes have slipped fully out of the glenoid fossæ and rest entirely in front of the articulating eminence, as exhibited in the view.

FIG. 508.—COMPLETE DISLOCATION OF JAW.



In the second, the condyles rest upon their interarticular fibro-cartilages, directly over the articulating eminence, and will remain fixed, or may fall backward or forward as directed by accident, not being retained in their position, as is frequently thought, by the coronoid processes being hooked under the malar bones, but resting, as it were, upon points with complete balance in the muscular structures. The forms described are bilateral, the articulations of both sides being involved.

A unilateral dislocation relates to one side.

The diagnosis of a luxation is an exceedingly simple matter. An open mouth, with inability to close it, the lower jaw thrust forward in a straight line, or otherwise turned to the right or the left, according to the accident, indicates a luxation of bilateral or unilateral character.

The exciting causes of dislocation are various: laughing, yawning, vomiting, putting large bodies into the mouth, blows received upon the chin from above downward, or in front, while the mouth is open; the extracting of teeth, or extending the jaws widely for the convenient filling of them, etc. The first case ever met with by the author occurred with a middle-aged man while he was laughing immoderately.

A predisposing cause of the accident resides in a general or a special laxity