

cal injury of one form or another, either by the surgeon's knife, saw, or cautery, or whatever other instrument he may use in operating upon his case, or from direct accidental injury to the parts themselves. By indirect traumatism I mean simple abrasion of the surfaces from forcible blowing when the swollen tissues are either almost or altogether in contact, or abrasion of the surfaces by continuity of contact, as in cases of chronic congestive hypertrophy of the middle and inferior turbinated bodies. In the latter condition the vitality and resistance of the mucosa is in some cases so materially impaired, that the soggy tissues lose their contractile tonicity, and the membrane at the part of greatest pressure becomes so thin that intercapillary circulation is readily developed.

Perhaps of surgical instruments the electro or galvano-cautery is the one of all others the use of which within the nasal passages is most likely to be followed by the development of this condition. I do not want it to be understood that I side at all with the wholesale condemnation of the electro-cautery, which is at present becoming the fashion with many rhinologists. I fear that with us, as with other men, the pendulum is allowed to swing from one extreme to the other, and we have not yet learned to run the happy mean. I believe that when used with judicious care and precision, and in properly selected cases, there is no instrument more useful in our whole armamentarium; but that does not invalidate the fact of its effect in producing nasal synechiæ.

There are two reasons for this. The first being the escharotic effect produced by the high temperature of the cautery on the wall opposite to the one operated upon. The other, the fact that cautery operations are more frequently followed by temporary edema than are those of any other instrument. Hence, when the chink is narrow, the cautery should not be used unless we can secure complete separation of the two surfaces until healing has been completed.

When operations are performed with other instruments, such as the knife, saw, scissors, chisel, etc., the mucous membrane of the opposite wall should not be injured at all, while subsequent edema of the part operated upon is less frequent, and hence the formation of synechiæ not so likely to follow.

The prolonged existence of turbinal hypertrophy is not an uncommon cause of fibroid or ligamentous synechia. I have observed this as a result in several cases of atrophy of the turbinateds, cases in which, with almost complete shrinkage of the middle turbinated body, ligamentous bridges had formed connecting the lower border with the external wall. The only reasonable conclusion seemed to be that a former hypertrophy had filled the cavity; abrasion had connected contiguous surfaces at the most