An Interesting Case of Nasal Deformity Corrected by the ‘Paraffine Method’

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So rich and fruitful has been the progress of modern medical science, that but a comparatively few of the discoveries have received the mead of praise that is justly due. Of these none has been more fruitful of beneficial results than the discovery of the value of subcutaneous injections of paraffine (sic).

The case here presented appears to be unique—so far as I am aware—as to its cause and the character of the lesion...

H. S., age 29, single, male, of small stature and delicate build, became my patient two years ago. At that time, he was suffering from an intumescent rhinitis for which a linear cauterization was done, with complete relief to stenosis, and consequent improvement in general comfort. His nose was well shaped and aquiline in character, with rather a high bridge. Several months later he suffered an attack of acute inflammatory rheumatism which left him in a debilitated condition. He was then lost sight of, until last spring, when he appeared at my office with his facial appearance completely altered by a horribly deformed nose. He gave the following history: About 18 months previously he had been taken with a severe cold in the head that lasted several weeks. Towards the end of this cold his external nose became very much inflamed and nasal respiration was completely occluded by what must have been an acute swelling of the septum. The inflammation spread across the face as far as the ears. He did not remember that there was any large amount of discharge, nor any sudden increase of it, other than that usually accompanying a bad “cold in the head.”...The tenderness of the nose was very acute and persisted for an considerable period. Subsequent to this attack the anterior or cartilaginous half of the nose began to retract and became pale and cyanotic in appearance...

Local examination: The tip of the nose was sharp and pinched and the alae sunken. The nostrils were narrowed and collapsed, but there was no interference with nasal respiration. The bony bridge was high, and the sudden angular descent of the soft structures made a curious effect. The entire cartilaginous part was soft and freely movable. By grasping the mucous membrane that covered the cartilaginous septum, between the fingers, it was found that the triangular cartilage was conspicuously absent, though no perforation existed and no scars were present. There was no pus in the nose, and on the whole its inner arrangement was as it should be. The suggestion that in the paraffine method he might expect much improvement met with considerable enthusiasm from his family, but the patient did not take kindly to the idea. However, in August last he appeared again for treatment. He was taken to the hospital and without an anesthetic the injection was made with remarkable little discomfort and very satisfactory result.

Technic: Prosthetic paraffine with a melting point of 115 degrees was used. The patient was prepared the night before by thoroughly scrubbing the nose with soap and water several times, followed by alcohol and ether, after which a moist boric acid dressing was applied. The next morning it was again cleansed with alcohol and ether.

The syringe used was an ordinary metal piston syringe, with a large caliber 1¼ inch needle, thoroughly cleansed and boiled, the needle being wrapped with rubber tissue to ½ inch of its point.

The paraffine was thoroughly sterilized and the syringe filled and placed in water about 125 degrees.

The nose was grasped in the left hand, with the thumb and forefinger holding the mucous membrane of the septum; the syringe was then lifted from the hot water, and, after seeing that the lumen of the needle was free, it was rapidly thrust in, just above the margin of bone directly in the median line, and carried rapidly downward to the floor of the nose, the forefinger and the thumb guiding the needle between the two layers of mucous membrane. The piston was then pressed, but failed to budge. The needle was hurriedly withdrawn and found to have a plug of paraffine in the end...

Hot cloths were then placed over the nose for five minutes, when the injection was again tried, the needle entering the same opening. This time no difficulty was experienced, the nose being shaped carefully with the left hand as the paraffine was injected and the syringe withdrawn... Aristol was dusted over the two punctures and a collodion dressing applied. The patient was then put to bed and iced wet boric compresses applied for 24 hours. Recovery was uneventful...

Conclusion: The history of the cause of this deformity leads one to suspect either a septal abscess or an erysipelas. The absence of knowledge, on the part of the patient, of the sudden emptying of an abscess or increase of nasal discharge, with the apparent absence of scars, is not against the abscess theory, and the probability would seem that the condition was an erysipelas plus an abscess of the septum, which may have discharged posteriorly—possibly at night. On the other hand, however, the absence of any considerable amount of cicatricial binding down of the septal mucous membrane would be against the abscess theory. May the condition not have been an erysipelas with thrombosis of the main nutrient vessels of the cartilages, which resulted in a more or less complete resorption of these structures?

Regarding the one difficulty in the injection, that of plugging of the needle, but one explanation can be satisfactorily given and it is one well worthy of consideration. At the instant before injection the paraffine flowed freely, but, owing to the character of the lesion, it was necessary to carefully insert the needle so as to avoid puncturing the septal mucous membrane, and causing serious infection. The circulation of this atrophied region was such that it was distinctly cool to the touch. The result was instantaneous hardening of paraffine in the needle upon contact, which was avoided in the second injection by the application of hot cloths to the nose.
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