Bucconasal Fistula with Bilateral Supernumary Teeth in an Operated Cleft Lip and Palate Patient
(A Case Report)

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Introduction

THE persistant bucconasal fistula with nasoalveolar opening is one of the known sequelae following repair of complete cleft lip and palate. This is more observed in the patients who are operated without observing the proper technique during the first stage of operation of cleft lip and anterior palate. Though the occurance of this sequelae is not so uncommon but its closure becomes a difficult task, with high incidence of its failure rate as is clear from the available literature. The case presented in this article with its successful closer had persistent bucconasal fistula with nasoalveolar opening. Besides this he had bilateral supernumary teeth, one each present in either nostril floor, which appears to be a very unusual additional feature in the available literature which prompted us to put this for the record in the literature.

Aetiopathology

The occurance of this type of sequale (fistula) is either due to unaquaitance of the proper technique or lack of care during primary closure of the lip and anterior palate in a complete cleft lip and palate patients. The etiopathology of the supernumary teeth is not yet well understood. The different theories have been put forward to explain its existence. According to one view, it might be due to exuberrant growth of the dental lamina giving an additional tooth, the second view explains due to dichotomy of the tooth germ and the third possibility may be that supernumary tooth may be derived from the epithelial clumps.

Case History

A 6 years boy was brought to us with a persistant communication between labial sulcus and nostril on the left side in an old operated case of complete cleft lip and palate of left side. There was no leakage of food or fluids through this.

This boy was born with complete cleft lip and palate on left side without any other apparent congenintal abnormality. The defect was closed in two stages at the interval of one year, first the lip was closed then followed by palate closure. Later on parents noticed regurgitation of fluids through the nose. The leakage

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stopped spontaneously after two years of the operation. But communication could be seen in between the labial sulcus and nostril on the defective side.

On physical examination, the boy was perfectly alright. He had nasality of the voice. The nose tip was slightly depressed with wide left nostril associated with mild flaring of the left ala. The irregular scar of the lip closure with notching of the vermilion border was apparant from a distance. The cupids bow was not well formed.

The upper lip frenulum was short in height. The alveolus was cleft on left side alongwith the fistula in labial sulcus. This was communicating the labial sulcus to the nasal cavity (Fig. 1). It was about $1\frac{1}{2}$ cm. $\frac{1}{2}$ cm. in dimension. On its medial edge a supernumary tooth was present in the nostril floor (fig. 2) projecting outside, which parents had not noticed. The old scarring of the palate repair was present in the palate. The

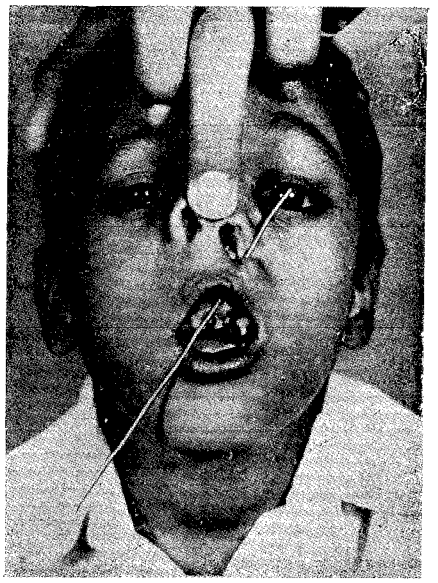

Fig. 1—Pre-operative phofograph showing the communication probe in place.

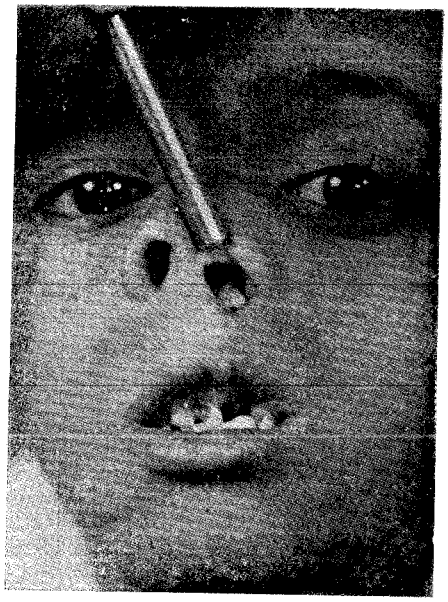

Fig. 2— Pre-operative photograph showing supernumary tooth in left nostril.

velopharyngeal space was wide and child had nasality of the speech. The maxillary arch was deformed. Its lateral segment was collapsing medially and medial segment was projecting forward. All the teeth were deciduous in form of *edcb|abcde*. It was not possible to distinguish anatomically a palately placed carries tooth whether it is "a" or "b". The oral hygiene was very poor, most of the teeth were affected with carries including the supernumary teeth.

The haematological and other routine examinations were within the normal limits. But the radiological examination revealed an unerupted supernumary tooth

in right nostril besides the erupted one in the left nostril which could be felt on deep palpation.

The extraction of supernumary tooth and closure of the fistula was planned. First the erupted supernumary tooth was extracted. After one week of this the fistula was closed in three layers. Nasal

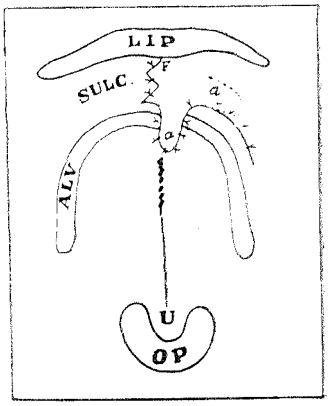

Fig. 3—Line diagram showing rectangular buccal mucosal flap transposing over the alveolar cleft.

floor was completed by approximation of septal mucosa and nasal mucosa from its lateral wall. Then the soft tissue and muscle were approximated. The labial mucosa was stitched together after making 'Z' plasty in the short frenulum, thus gaining in its height. A rectangular flap of the labial mucosa was taken in and was stitched to the anterior palate (Fig. 4) thus closing the alveolar gap affer making raw the cleft edges of the alveolous on either side. The post operative phase was uneventful. The stitches were removed on the 5th day and fistula closed nicely with alveolar closure (fig. 5).

After one week of this the other side unerupted supernumery tooth was extracted intra-orally by making direct incision over the tooth.

Discussion

The bucconasal fistula is very well reported in the literature as one of the known complication of lip and palate closure in complete cleft lip and palate

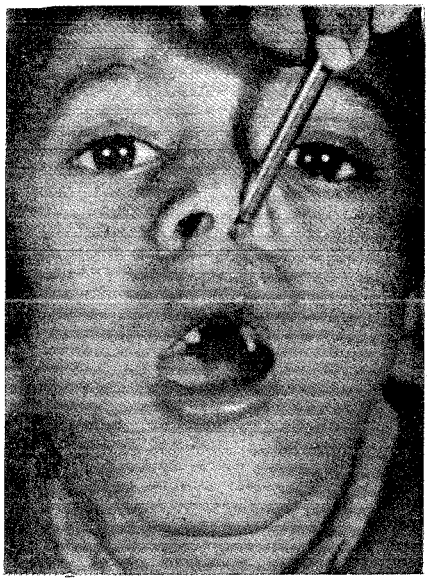

Fig. 4—Post-operative photograph after extraction of supernumary tooth and closure of fistula.

cases done by unqualified and careless operators.

Later its closure becomes the tedious problem. Even if the fistula is closed in lip and sulcus the alveolar gap remains as such. But in our technique, putting the mucosal flap over the alveolar gap and taking it into the anterior palate gives excellent result.

The supernumary tooth usually are placed near to the arch but they may be abnormally placed on labial or at palatal aspect of the arch. But to have a super-

numary tooth in the nostril is very rare and a remote possibility. Only Edicott (1934) has reported o.e such case having supernumary tooth in the nostril that also too only on one side.

Summary :

This article summons a 6 years boy born with congenital complete cleft of lip and palate of left side. The lip and palate was closed in two stages. But he had persistent bucconsal fistula and bilateral supernumary teeth, one each on either nostril. The left was erupted and right one was unerupted. The supernumary tooth were extracted in two stages. The fistula was closed in three layers with the transposition of labial mucosal flap for alveolar gap with successful result.

REFERENCE

1. Edicott, C. L. : A case of supernumary incisor erupting into nose, Brit. Dent. J. 56 : 385.