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CONGENITAL MIDLINE FISSURES OF THE NECK A REPORT OF TWO CASES

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SUMMARY

Two rare cases of congenital midline fissures of the neck, have been reported. Both have been treated by excision and Z-plasty. Embryology, clinical appearance and treatment has been discussed along with review of the available literature.

(*Key Words* : Fissures—Congenital, Deformities Neck)

Case Reports

Case I : V. A., a female child aged 4 years, was born to non-consanguinous parents after full term normal delivery. Parents brought the child with a complaint of a scar in the midline of the neck and difficulty in full extension of the neck. On examination there was a fissure in the midline of the neck of 5 cm in length extending from hyoid region to below the thyroid cartilage. Both ends of the scar ended in a blind pouch. A nipple like skin tag was present at the upper end (Fig. 1). There were no other congenital abnormalities.

The child was operated under general anaesthesia. The fissure was completely excised upto the deep fascia and the wound was closed by double Z-plasty. When the child came for check up after 3 months full extension of the neck was possible, but some hypertrophy of the limbs of Z-plasty was observed (Fig. 2).

Case II : A., a male child aged 10 years was born to parents of non-consanguinous marriage, after full term normal delivery. The boy was brought to us by the parents with the complaint of restricted extension of the neck. On examination we found a 2 cm long fissure in the midline of the neck near the hyoid region with a nipple like skin tag in the upper part (Fig. 3). There was associated midline webbing of the neck. Extension of the neck was restricted (Fig. 4).

Under general anaesthesia the fissure was completely excised and the defect was repaired by Z-plasty (Fig. 5). Follow up after 3 months showed normal extension of the neck (Fig. 6).

Discussion

Congenital midline fissure or cleft is a rare congenital abnormality and very few cases have so far been reported in literature. They may occur alone or there may be associated anterior webbing of the neck. In one of our cases where the fissure was near the hyoid region, anterior cervical webbing was also present.

Regarding the etiological factors there was no hereditory or environmental factors in any of the cases reported. It appears to be due to failure of fusion of the paired branchial arches in the process of development of the neck during 8th to 12th week of foetal development.

Treatment in early infancy is advocated to prevent developmental abnormality of the neck or of the mandible. The treatment is in the form of excision of the complete fissure with any sinus tracts or skin tags if present and repair of the defect by Z-plasty. In most of the cases previously reported, the authors have observed hypertrophy of the oblique limbs of the Z-plasty. We also had similar experience in one case even though wound healed well initially by primary intention.

Conclusion

Congenital midline fissures of the neck can be successfully treated by Z-plasty.

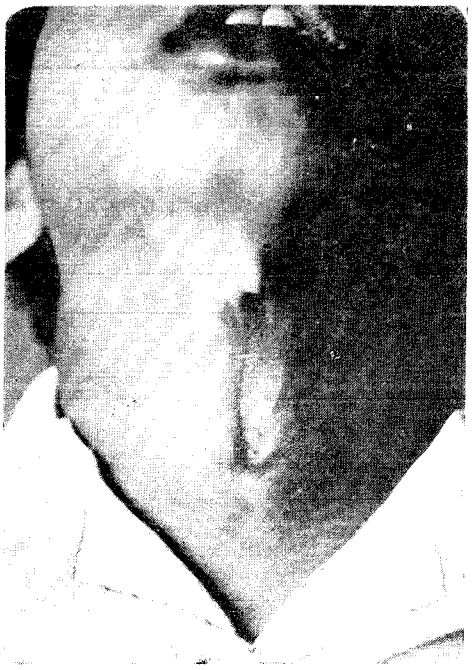

Fig. 1. Case I, Pre-operative photograph.

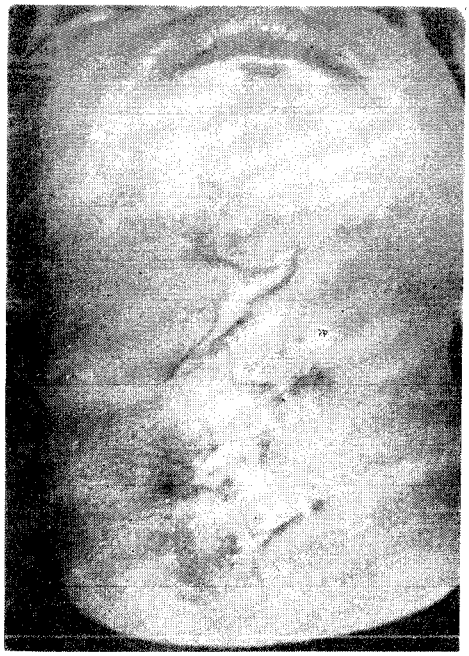

Fig. 2. Case I, Post-operative photograph.

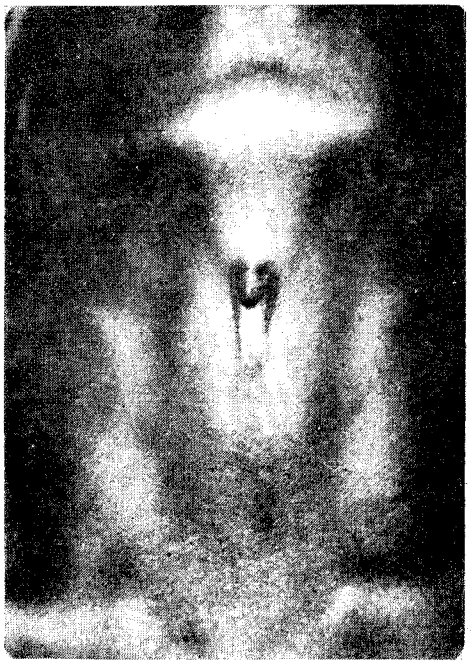

Fig. 3. Case II, Pre-operative photograph.

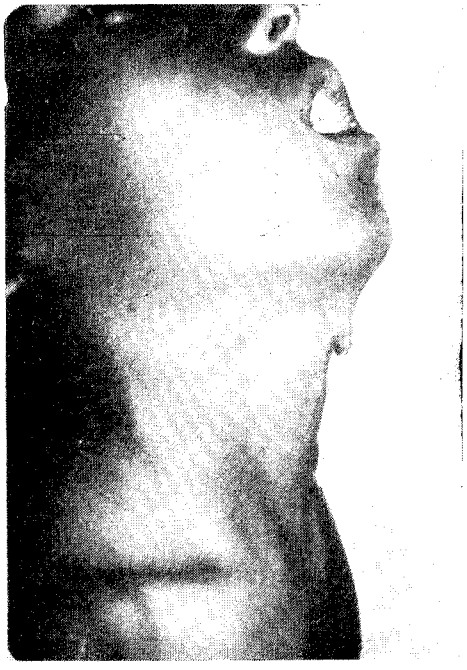

Fig. 4. Case II, Pre-operative (lateral view).

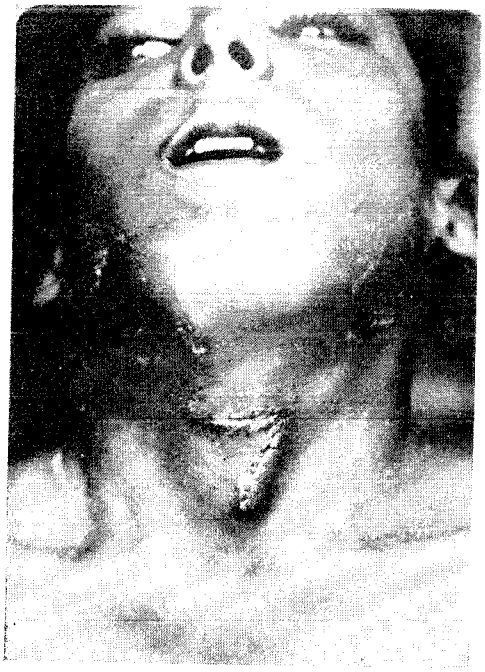

Fig. 5. Case II, Post-operative result.

Fig. 6. Case II, Lateral view showing the result.

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