



## Case Report

# Suspected constriction band impression on the nape - A case report

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### ABSTRACT

Partial superficial congenital constriction band or groove on nape is very rare and needs only cosmetic surgery\*. This case is being reported for its extreme rarity.

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## 1. Aim

The case of this type of suspected constriction band on the nape has not been reported in literature. The patient's history reveals to be of congenital origin. The band or groove seems to be of partial or incomplete ring at subcutaneous level needing only cosmetic surgery. We had to differentiate from healed tuberculous scar band which is very unlikely as there is no history of tuberculosis. It is neither seems to be a case of lipodystrophy.

## 2. Case Report

Twenty years old female patient [Figure 1 ] who otherwise fully healthy came to us for cosmetic surgery for congenital depressed grooved thin band over the nape region. She had no history of diabetes, tuberculosis, lipodystrophy disease or any injection given to that site. The depressed constricting band seems to be superficial and not formed on the anterior side of neck. So there is an incomplete partial constricting band without having any constricting effects. Patient wanted

the removal of the band for cosmetic reason. She wanted to look fit for marriage.

On examination the above things were correlated and analysed. It was found that x-ray of chest and neck to be normal, with negative TB gold test, and all other routine blood tests were normal.

The lesion was excised and multiple unequal Z-plasties were done in two layers to prevent long term contracture. The subcutaneous layer was closed with 4-0 vicryl and skin was closed with nonabsorbable 4-0 prolene which was removed later[Figure 2].

The result was good.

## 3. Discussion

Congenital constriction grooves is a rare condition. Its incidence is 1: 1200 to 1:15,000 live births and both sexes are equally affected. The distal part of upper limbs, and its longer digits are more affected.<sup>1,2</sup> It may be associated with other congenital disorders such as musculoskeletal, craniofacial and thoraco-abdominal disorders.<sup>3,4</sup> But involvement of the neck partially or fully has never been reported. It may present as SHALLOW

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**Fig. 1:** Congenital partial constriction band



**Fig. 2:** After treatment

GROOVES in some cases to complete amputations in extreme cases. The lesion could be partial or completely circumferential.<sup>5</sup> The two main aims in the management of congenital constriction band syndrome (CCBS) are first to improve the function of and if required then go for cosmetic appearance. The excision of the constricting band or groove is to be done and wound closure should be done by multiple Z-plasty or W-plasty in two layers allowing the fatty tissue to naturally align itself under the repaired skin. The treatment plan for each patient must be individualized for the best outcome of surgical procedure.<sup>6</sup> Superficial grooves may not require treatment excepting aesthetic surgical

procedure as they do not interfere with lymph drainage or compress neurovascular structures and specially when they are not even circumferential. The causes of CCBS may be due to primary defect occurring before the embryo differentiation at the level of subcutaneous germ plasma<sup>7</sup> and for this intrinsic theory readily fits in explaining the craniofacial and internal organ disorders<sup>5</sup> associated in some cases. The extrinsic theory,<sup>8</sup> suggests that early rupture of the amnion, leading to oligohydramnios, could cause proliferation of mesenchymal bands or amniotic bands which could then entangle the limb, causing the constrictions leading to acrosyndactyly,<sup>9</sup> amputation<sup>10</sup> and club feet.<sup>6,8</sup> Therefore treatment plan for each patient is unique.<sup>6</sup>

The other differential diagnosis can arise from lipodystrophy which affects the subcutaneous fatty layer loss and can be generalized, partial or localized.<sup>11</sup> According to genetic susceptibility it can be congenital and acquired. The congenital lipodystrophy is very rare and has predominantly autosomal recessive pattern of inheritance. It may occur as generalized or partial ways and are often accompanied by metabolic disorders, especially hypoleptinemia, hypertriglyceridemia and insulin resistance. Here this case does not have any metabolic disturbances.

The incidence of skin tuberculosis is very low has fallen from 2 to 0.15%<sup>12</sup> due to the availability of effective anti-TB drugs and general improvement in the living hygiene.<sup>13</sup> Cutaneous tuberculosis is a rare and represents 1% to 2% of all cases of extrapulmonary tuberculosis. The three most common forms of this are scrofuloderma, lupus vulgaris, and tuberculosis verrucosa cutis. Scrofuloderma forms the largest group followed by lupus vulgaris (23.52%) and TBVC (13.73%).<sup>14</sup> Primary cutaneous tuberculosis is caused by direct inoculation of tuberculosis bacilli into a traumatized area. Skin lesions caused by exogenous inoculation of microorganisms are usually characterized by painless papules, plaques, nodules, and indolent ulcers with regional lymphadenitis. The healing scar after treatment with (Anti tuberculosis treatment) ATT is more of cicatrized in appearance than the one shallow groove shown in this patient.

#### 4. Conclusion

Partial congenital superficial constriction band on nape is very rare and needs only aesthetic surgery. This case is being reported for its extreme rarity.

#### 5. Source of Funding

None.

#### 6. Conflict of Interest

None.

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