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INTEGRA Dermal Regeneration Template

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Case report

- A 6 year female child came with a hairy neavus on nose since birth.
- Hairy neavus of size 4x3cm involving the right side dorsum lateral wall, ala, soft triangle and extending on to cheek on right side and lateral wall on the left half of the nose.



- Indications for surgery-
 - 1. Aesthetic improvement
 - 2. Potential for malignant transformation
- Planned for excision followed by placement of INTEGRA Dermal regeneration template.



INTEGRA

- Integra, a bilaminar dermal regeneration template, has a superficial layer composed of silicone sheeting that mimics the protective properties of the epidermis.
- The underlying matrix is composed of a mixture of bovine collagen and glycosaminoglycans from shark chondroitin-6-sulfate.
- It serves as a framework for growth factors and cells during the 2–3 weeks it takes to become vascularized and replace lost dermis.
- Following ingrowth and vascularization, it can then be covered with a split-thickness skin graft.

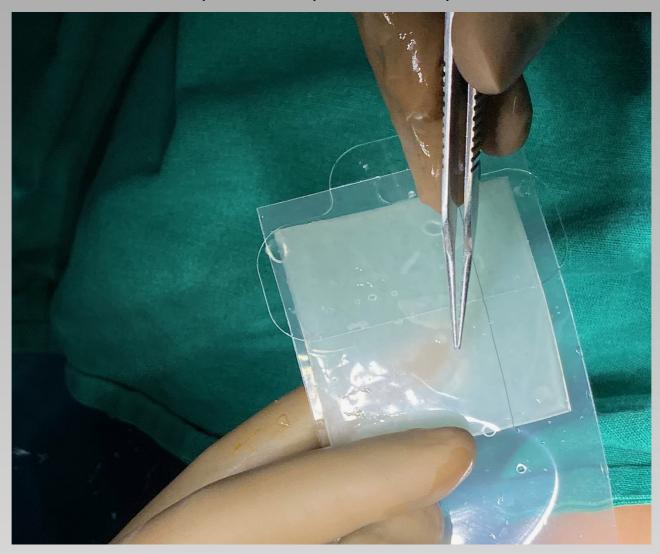
• Impression of the neavus taken to cut INTEGRA template of the exact shape.



• Full thickness excision of the neavus , Post excision defect



• INTEGRA Template. Superficial layer of silicone sheet



• INTEGRA sheet cut to exact defect size and fixed in the defect.



• Tie over dressing done for 2 weeks.



• Superficial silicone layer over the regenerated dermis peeled off after 2 weeks



• Thin Split Thickness Skin Graft harvested from the right buttock area using a dermatome and fixed over the regenerated dermis





Results 2 weeks Postoperative



• 2 months Postoperative





Discussion

- Paucity of matching tissue over the face for reconstruction.
- Traditional treatment methods include Full thickness skin graft, Local or Regional Flaps (Forehead flaps)
- FTSG leaves a patchy appearance and the junction of the skin and graft is never smooth, attracts attention and causes aesthetic dissatisfaction in the patient.
- Flaps are bulky, the tissue is not contiguous and hence does not match in texture, colour and adnexal characteristics.
- Donor site morbidity in the case of flaps.

Discussion

- Thin STSG harvested for the INTEGRA template can be harvested form hidden areas and donor site morbidity is minimal
- After take INTEGRA resembles native dermis in all characteristics leading to good aesthetic result.

CONCLUSION

- INTEGRA is now available in the country at reasonable price though still expensive (5x5cm approx Rs 20,000 (promotional price).)
- Ideal for reconstructing defects of soft tissue over face and aesthetic landmarks.
- No distortion of landmarks as a result of flaps or graft contraction.
- Excellent skin colour and texture match
- Retains the property of blushing of skin over the face.