SURGICAL RECONSTRUCTIONS AND PATIENT NORMALIZATION POST-ENDOVASCULAR ABLATION OF HEAD & NECK VASCULAR MALFORMATIONS

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FINANCIAL DISCLOSURES
None

BEAUTY ASYMPTOTE
1. Beautiful
2. Attractive
3. Average
4. Unattractive
5. Monstrous

SEVEN PRINCIPLES OF REPAIR
1. Purpose is not excision of vascular lesion (nidum)
2. Four volume considerations: Skin, Fat, Muscle, Bone
3. Three dimensions must be in proportion
4. Function: Animation, Speech, Mastication, Breathing, Vision
5. Stage Repairs: conservative excision
6. Place scars in Relaxed Skin Tension Lines
7. Volume and texture in Facial Esthetic Units

SEVEN RECONSTRUCTIVE STEPS
1. Photos in Neutral Head Position
2. Predictive drawings outlining flaps, excisions, grafting, and stages
3. Confirm clearance of major VM
4. Operate 24-72 hours after embolization.
5. Blood
6. Anesthesia
7. Postop healing accommodations.

SPECIALIZED INTRAOPERATIVE MANAGEMENT
CASE 1

27 yo female with AVM that presented at 1 year of age. Over past seven years she has had multiple embolization procedures with Dr. Yakes. There is hypertrophic growth and pressure from the upper lip has pushed the maxillary teeth on the right side into a palatal cross-bite and open bite.

Vermillion texture deformity, old vertical lip scar, thick venous nodular upper and lower lip, displaced commissure, maxillary deformity with malocclusion.

PREDICTIVE PHOTO MANIPULATION

Preop | Surgeon Prediction | Patient Desired Result

Temporary closure of wetline to assess volume and position
Additional excision of vermillion to gain symmetry with the left side
Placement of dermal fat graft at vermillion white line for lip projection
Horizontal mattress cutaneous closure for creating the vermillion white line.

Marking for skin excision with an Austin commissural lift.
New vermilion position with tacking sutures and outline of lip reduction stage.
CASE 1

Preop | Surgeon Idea | Patient's Idea | Five Week Postop

CASE 2


CASE 2

Ablation 10-19-2010

Note large vertical excess growth. Anterior tongue scarred and narrow. Occlusion is Class II openbite.

Preop Cephalometric Tracing | Prediction Cephalometric Tracing

Cephalometric analysis showing lower face vertical mandibular excess.

Stage 1: Tongue reduction and submental suction and open liposcopy
CASE 2

Preop Postop

Stage 2: Genioplasty osteotomy of inferior border with intermediate wedge removal.

Stage 2: Assess after chin wedge removal obtained for submental and sublingual fibrofatty tissue excision with genioglossus advancement.

CASE 3

57 yo with “hemangioma” since age 7. Multiple flaps, grafts, expander. Facial paralysis and drooling out the corner of her mouth.

Removal of redundant lip tissue and modified Facelift with reconstruction of the corner of the mouth.

6 month postop
One week post op.

CASE 3

One week post op.

CASE 4

58 yo male, central AVM diagnosed 7 yrs ago. 3 yrs ago had resection and free fibular graft. Subsequently, a hip graft to augment the mandible’s height. Then dental implants to restore his teeth.