

Symphyseal Aesthetics

Understanding the Genium

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GSR Institute of Facial Plastic Surgery



- Non-profit hospital established in 1996
- Dedicated Cleft & Craniofacial Centre of Excellence
- Presently 1,600 cleft and craniofacial surgeries are done every year
- 3 surgeons and 4 fellows with full support team
- More than 30,000 documented cleft & craniofacial surgeries have been performed since 1996
- 600 primary new born cleft children are registered every year

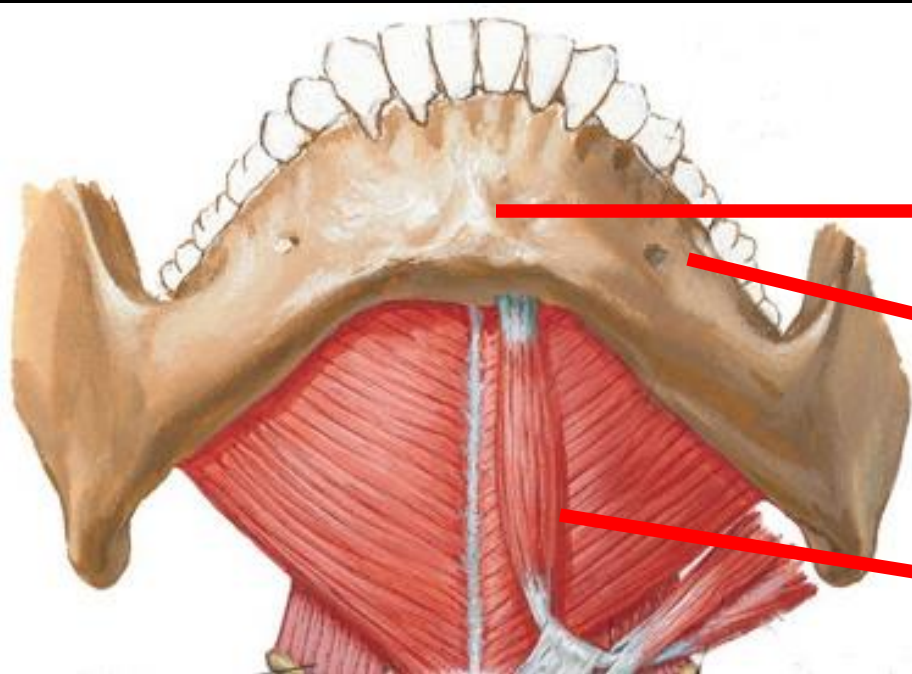


Genium



Genium

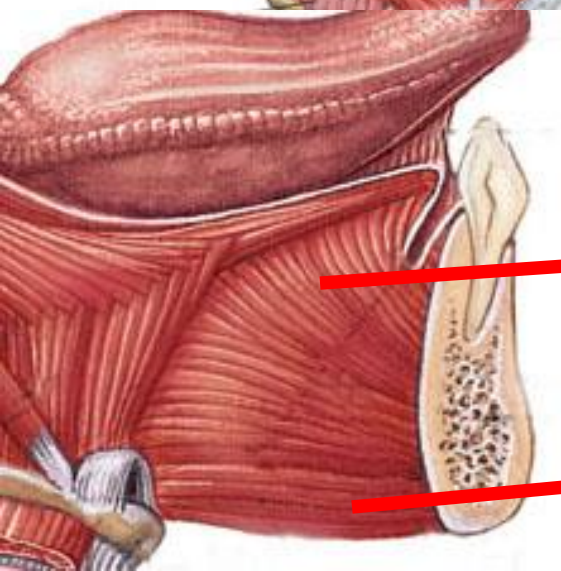
Anatomical Considerations



Roots of the anterior
mandibular teeth

Mental Foramina and
nerve

Anterior Belly of
Digastric Muscle



Genioglossus Muscle

Geniohyoid Muscle

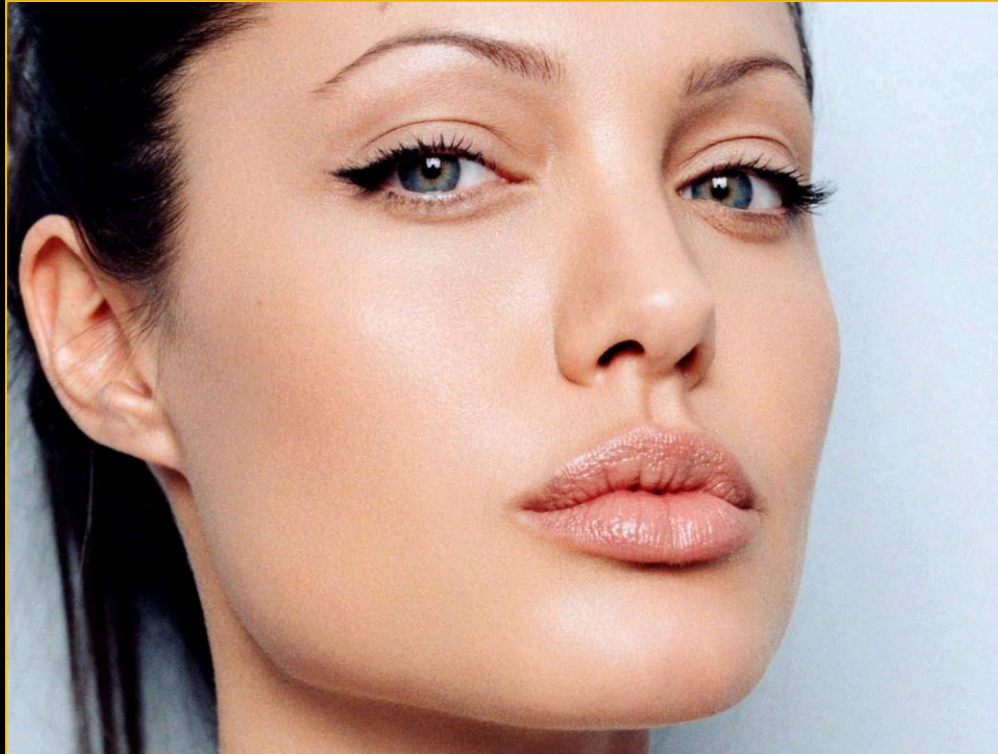


Genium

Strong

vs.

Weak Jawline



Genium

Why do a genioplasty?

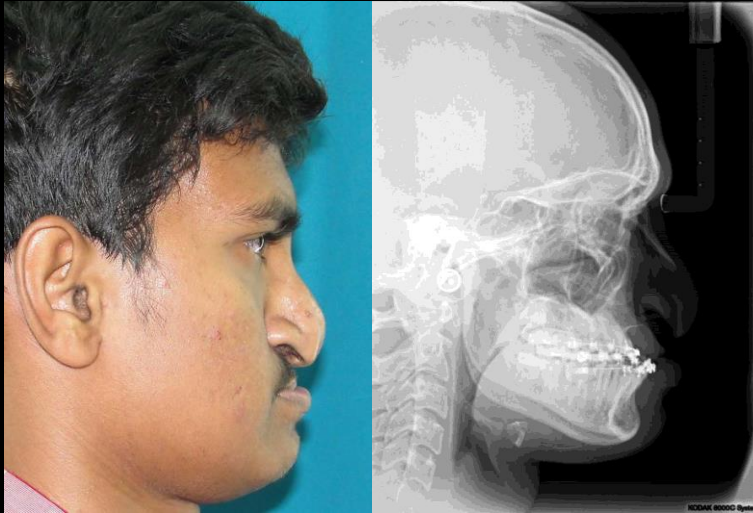
- Protruded Chin???
- Retruded Chin
- Deepening of Labiomentental Groove caused by Vertical Shortening of the anterior lower third of face
- Asymmetric Jawline



Genium

Always ask....

- Is the genium alone the problem?
 - Look at facial balance
 - Look at occlusion



In most patients the chin is not the only part of the face that is not harmonious



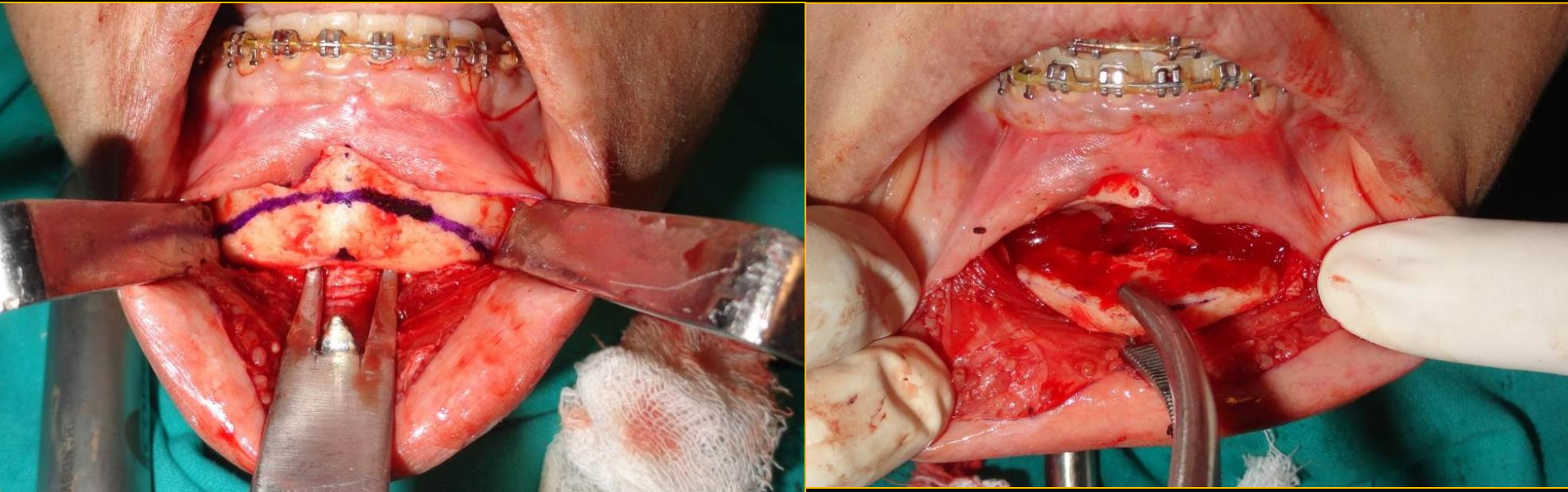
Incision



‘**Crown**’/**Mommaert**’s incision is given to avoid vestibular shortening and tension free closure.



Bone Cuts

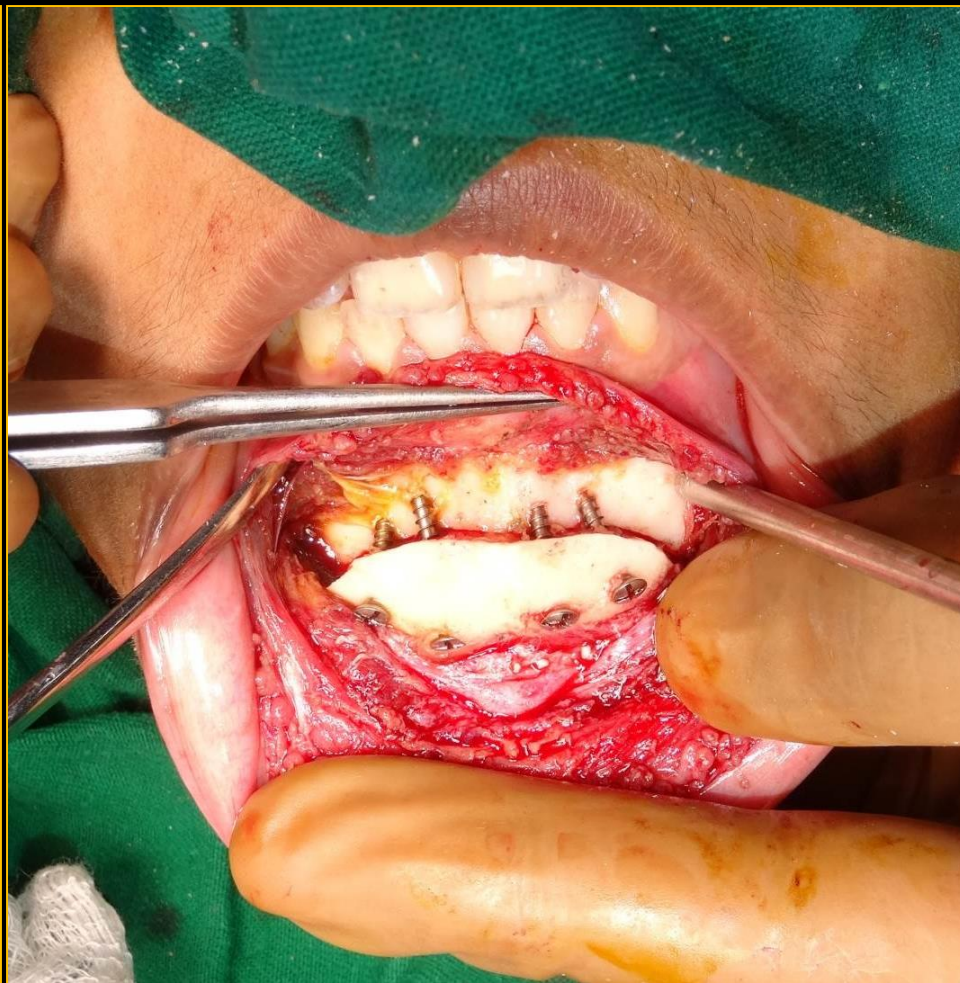
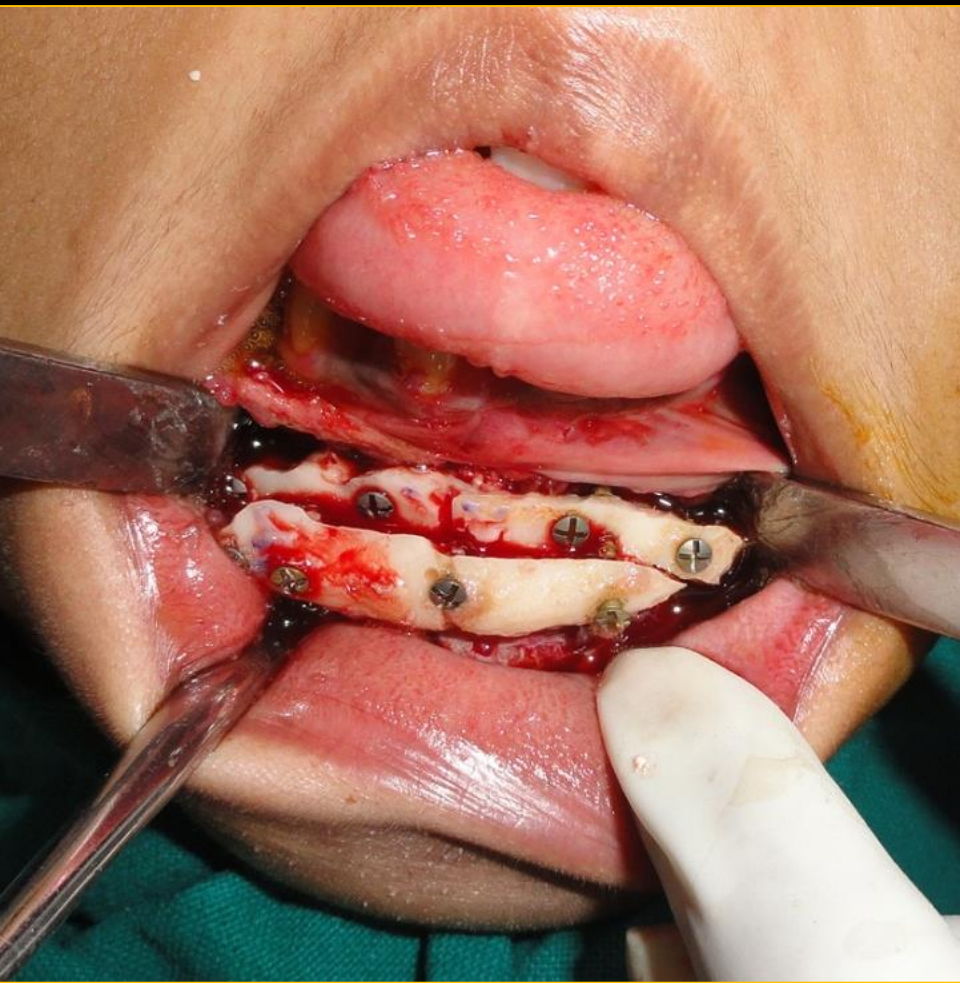


Bone cuts can be given in such a way to move the genium

- Anteriorly
- Inferiorly
- Laterally
- Posteriorly
- Superiorly
- Propellar



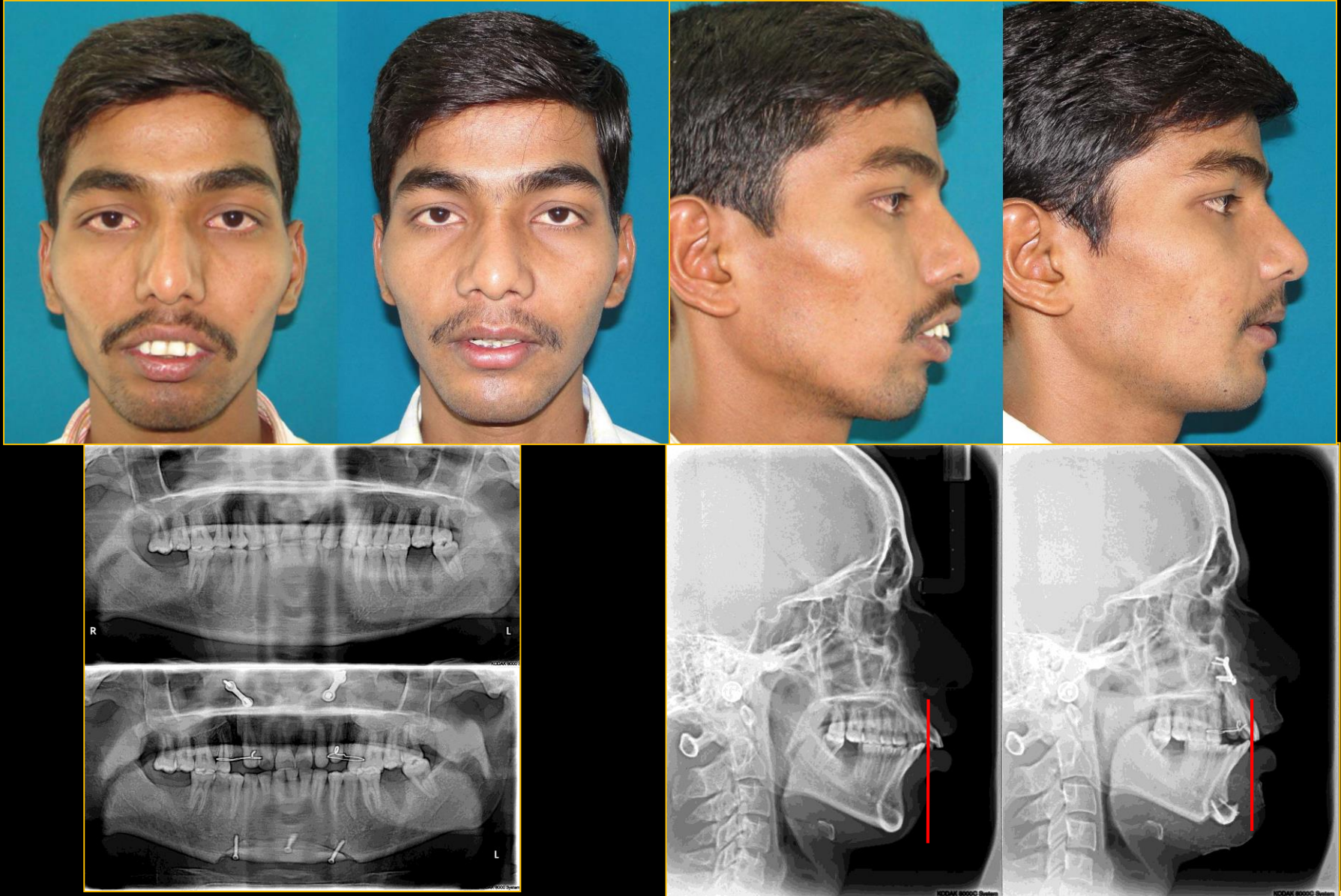
Fixation



Fixation is preferably done with 2.0 mm lag screws



Genioplasty (Anterior movement for correcting retruded chin)



One Piece Osteotomy



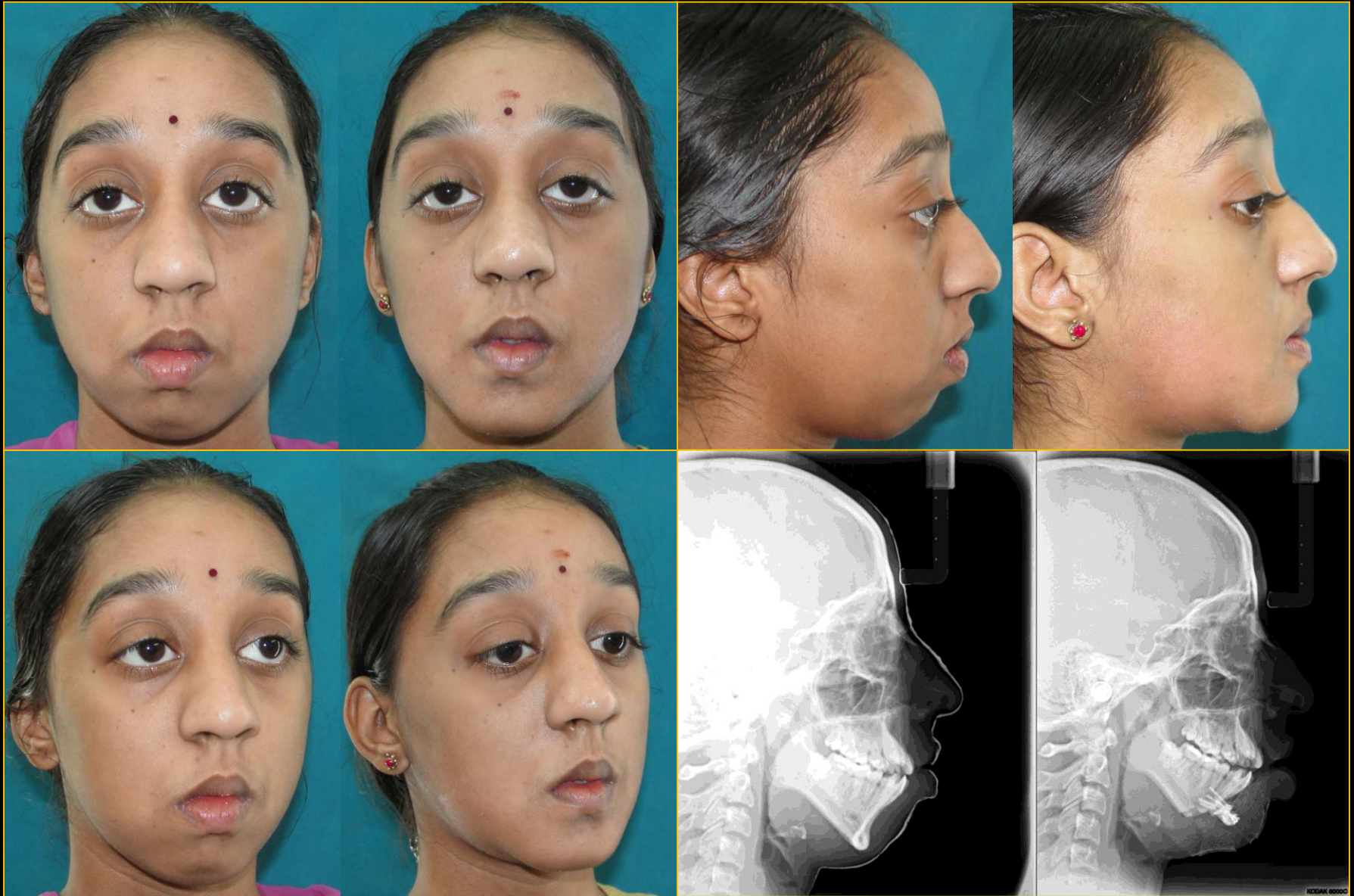
Genioplasty (**Anterior movement** for correcting retruded chin)



One Piece Osteotomy



Genioplasty (**Anterior movement** for correcting retruded chin)



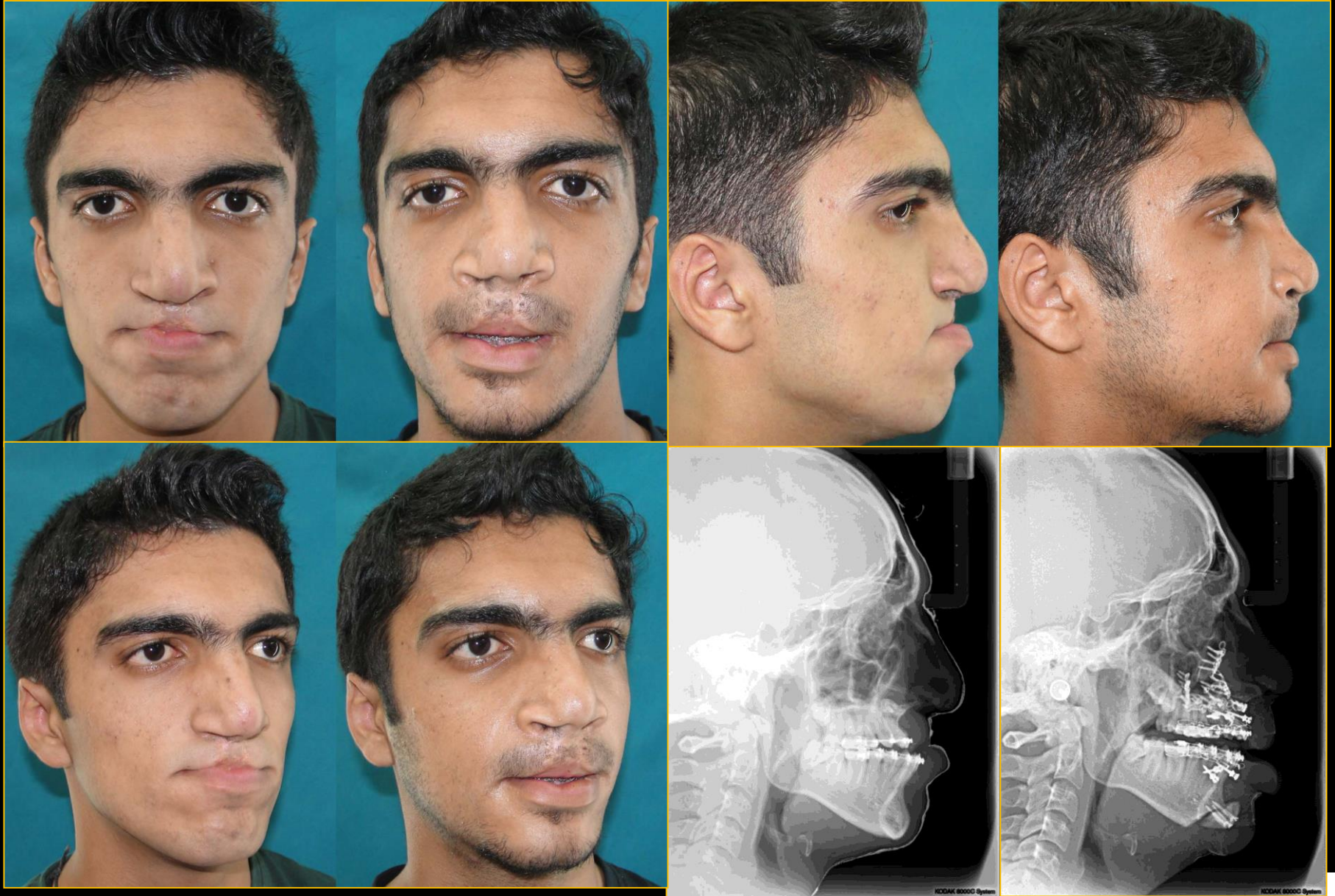
Two Piece Osteotomy



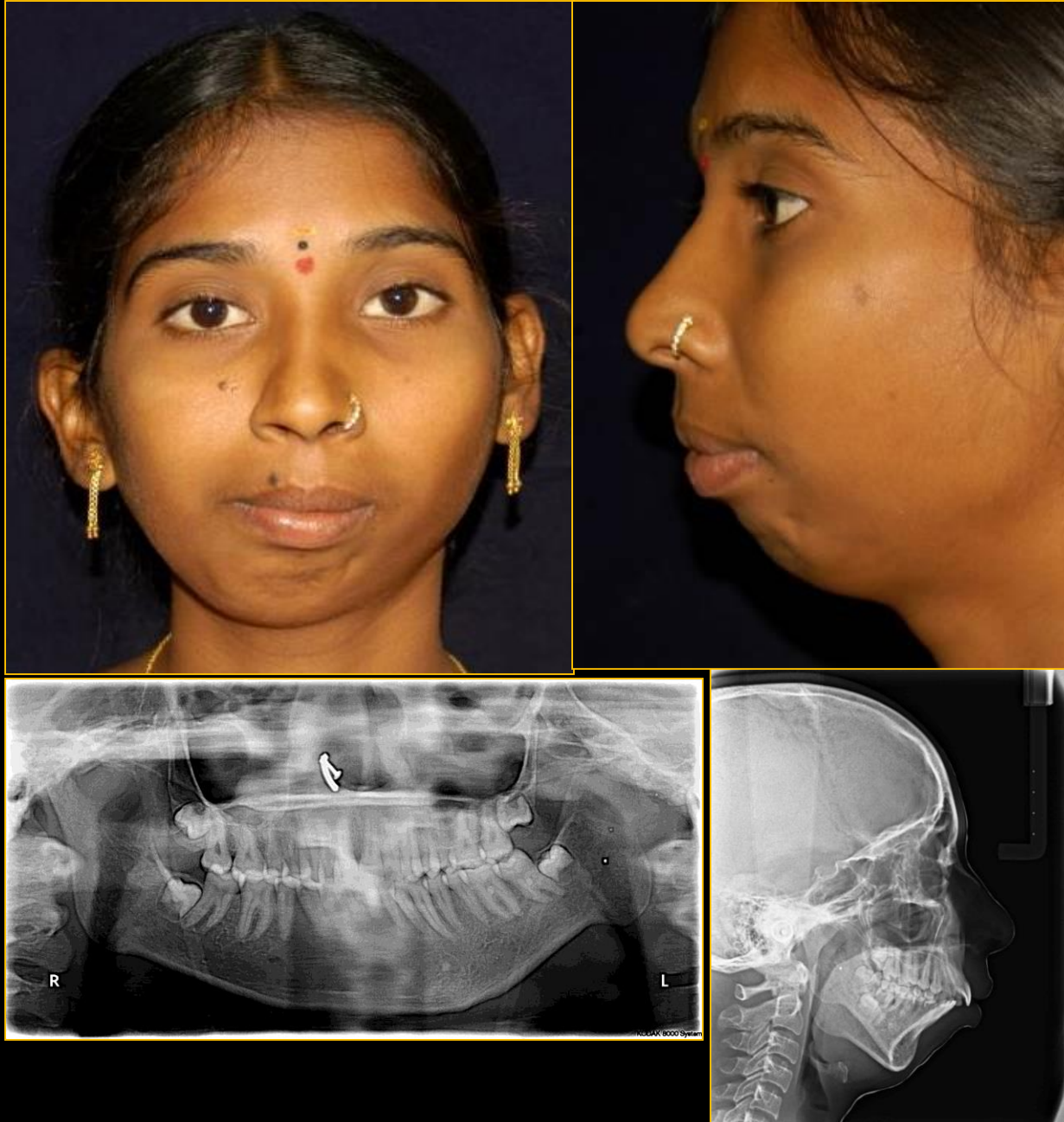
Genioplasty (**Inferior movement** for correcting vertical shortening)



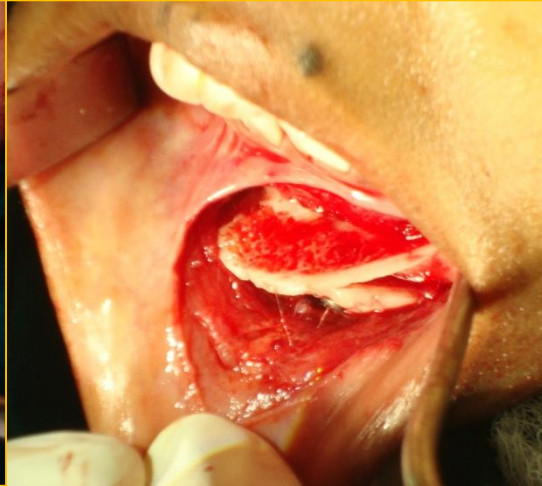
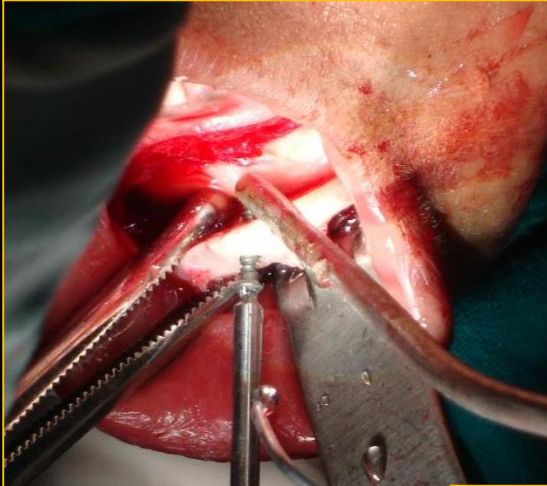
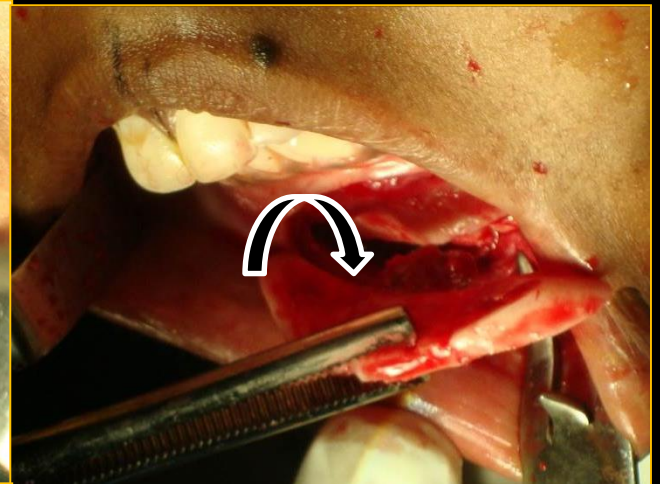
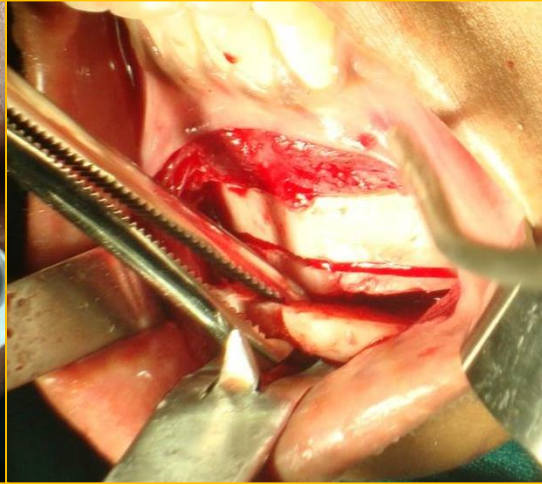
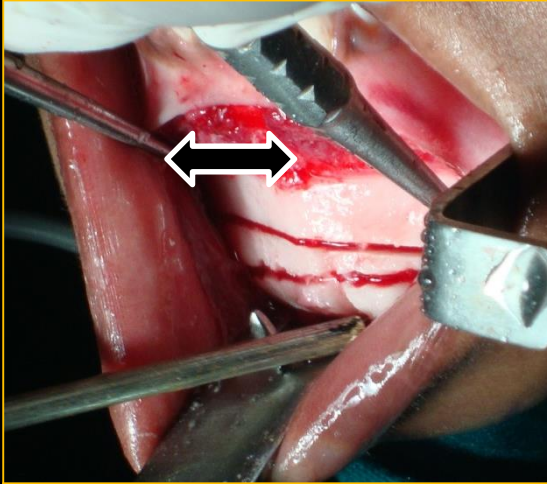
Genioplasty (**Superior movement** for correcting vertical excess)



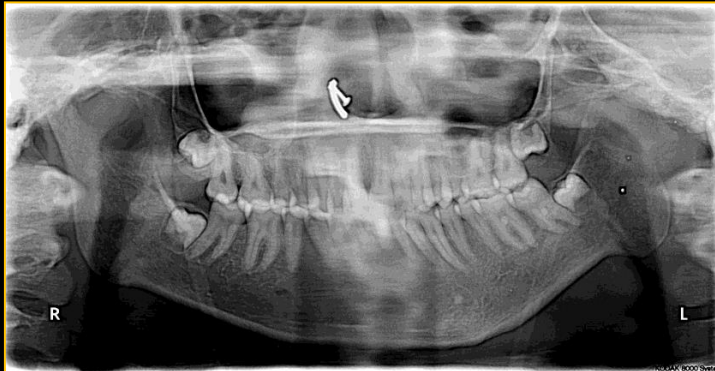
Propeller Genioplasty for correcting asymmetric jawline



Propellar Genioplasty



Propellar Genioplasty (Asymmetric Jawline)



Genium

Complications

- “Witching” phenomenon

Due to improper vestibular incision design

- Paresthesia

Due to compression or severing of Mental nerve.

Can be avoided by using Piezo Electric Saw



- Relapse

Due to extreme movements of the genium and improper fixation

- Necrosis

Due to excessive stripping of muscles and periosteum



Bring the Smile Back



Thank You

