1082

7 VIDEOS

030 01'53"
031 00'33"
INLAY SUR rep. 01'12"
OVERLAY SOUS rep. 0'58"
OVERLAY SUR 00'55"
Sheehy reprise 01'21"
Prise Greffe 01'05"
HOW TO CLOSE A TYMPANIC MEMBRANE PERFORATION

B. FRAYSSE

HO CHI MINH
November 24th-26th, 2019
GOAL OF THE PRÉSENTATION

- Indications
- Technique
- Results
- Complications
- Specific case children
SURGICAL INDICATIONS

Surgical indications may be

- Anatomical
- Functional
FUNCTIONAL INDICATIONS

- Functional benefit depends on the possibility to recover:
  1. An air conduction within 20 dB
  2. A symmetrical hearing with a binaural benefit
OPERATIVE TECHNIQUE

- The choice of operative technique varied according to:
  1. The otoscopic examination
  2. External canal anatomy
  3. Mucosal middle ear status
  4. Type and site of perforation

- The clinical history *(primary care or surgical revision)*

- The status of the contralateral ear
SURGICAL APPROACHES

EXTERNAL CANAL

ENDAURAL

RETROAURICULAR
GRRAFTING MATERIALS

- Fat
- Temporal fascia
- Cartilage
INTERÊT DE L’EPIFILM® EN OTOLOGIE
INTEREST OF EPIFILM® IN OTOTOLOGY

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Inlay Butterfly Cartilage Tympanoplasty in Children

Couloigner, Vincent; Baculard, Florence; El Bakkouri, Wissame; Viala, Paul; François, Martine; Narcy, P.; Van Den Abbeele, T.

Pediatric Otology & Neurotology
LE CARTILAGE

- Tragus / conca
- Remove fat and muscle
- Perichondre on one face
- Concavity toward the promontary
Prise cartilage – version courte – 0'51''
COMPARISON CARTILAGE/FASCIA

128 tympanoplasties Type 1 (2005-2008)

- Aponévrose temporale vs Cartilage
ANATOMICAL RESULTS

Tympans fermés (%)

NS
FUNCTIONAL RESULTS AT 12 MONTHS

- **Fascia**
  - Gain moyen = 10 dB*  
  (+ 2 dB)

- **Cartilage**
  - Gain moyen = 5 dB*  
  (+ 1 dB)
GRAFT MATERIALS

- Depends on various parameters:
  - Dry ear
  - Opposite ear normal
  - First operation
  - Inflammatory
  - Contralateral retraction
  - Second hand

- Fascia
- Total Cartilage
GRAFT POSITION

INLAY

OVERLAY

SOUS LE MANCHE

SUR LE MANCHE
OVERLAY TECHNIQUE

Under the malleus
OVERLAY TECHNIQUE

Over the malleus
CARTILAGE TECHNIQUE
LOU Josiane, 41 years

September 2007
LOU Josiane, 41 years

April 2009
CHOICE OF THE TECHNIQUE

- Posterior perforation primary case
  - Inlay over the malleus

- Total perforation primary case
  - Overlay over the malleus

- Inflammatory middle ear or secondary case
  - Cartilage over the malleus
RESULTS

1348 tympanoplasties

- Type I tympanoplasties
  - In children: 356
  - Other: 852

Type I tympanoplasties
RESULTS

- Global results
- Results according to techniques
- Results according to age
GLOBAL RESULTS

1st year

Closed tympanic membrane: 96%

Residual perforation: 4%
TECHNIQUES

- Overlay technique: 81%
- Inlay technique: 19%
INLAY REPERFORATIONS

Under the malleus: 9 %

On the malleus: 6.6 %

7.7 %
OVERLAY REPERFORATIONS

On the malleus: 4%

Under the malleus: 0%

2.7%
RESULTS IN CHILDREN

Closed tympanic membrane: 96 %

- Normal tympanic membrane: 87 %
  - Retraction: 3 %
    - S.O.M.: 5 %
  - Cholesteatoma: 1 %

4 % perforation
COMPLICATIONS

- Epithelial cyst
- Lateralisation
- Blunting
- Reperforation
Importance du suivi, surtout chez l’enfant
LATERALIZATION PREVENTION
BLUNTING PREVENTION
PREVENTION ANTERIOR REPERFORATION

Swallowing
CHILDREN

- At what age?
  - When an audiometrical test is available
  - At the end of adaptative disease
  - Follow up 6 months

⇒ Âge : 6 à 7 ans
CONCLUSION

1. Surgical indications depend on the chief complaints.
2. The choice of each technique depends upon a careful otoscopic exam.
3. According to our experience, overlay technique gives better results but should be done rigorously.
4. Results are the same in children and adults.
Thank you for your attention