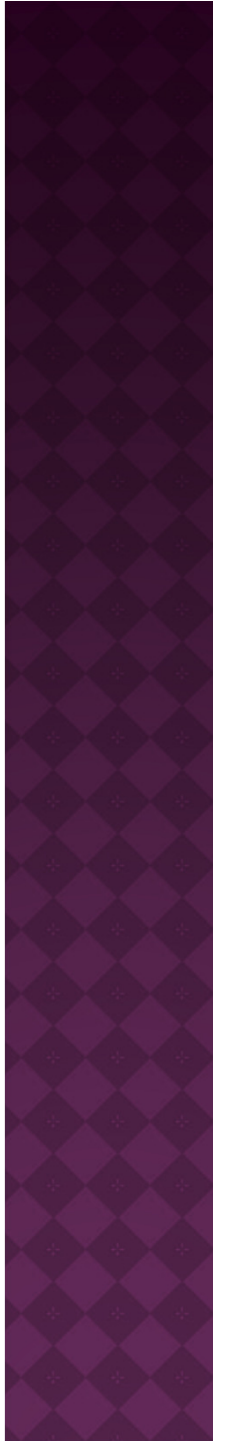




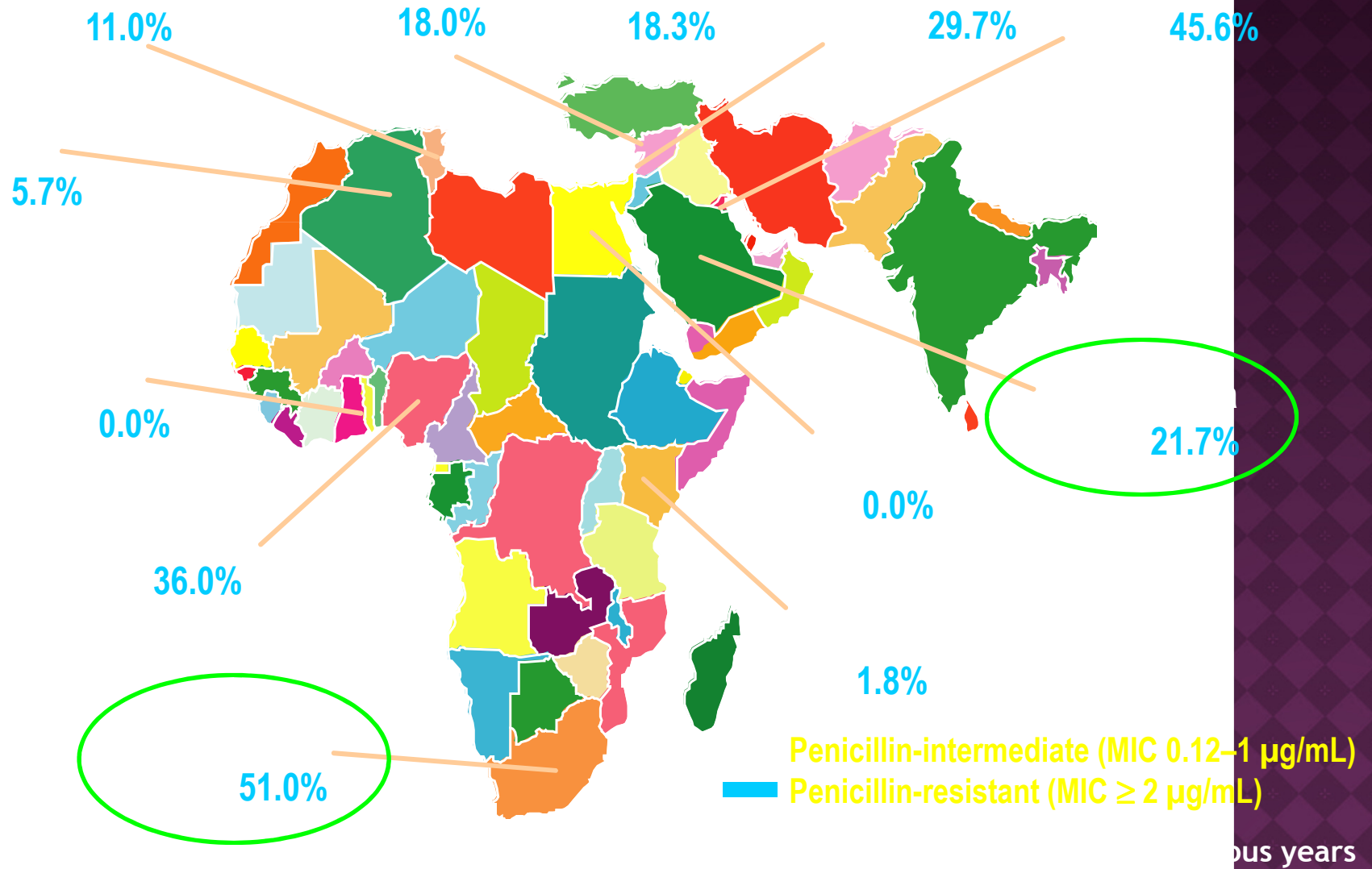
GLOBAL SATISFACTION IN TYMPANOPLASTY; TEN YEAR REVIEW: PATIENT PERSPECTIVE; WHAT IS TRUE SUCCESS?

M TSHIFULARO
DUBAI.OMICS 2015.





MIDDLE EAST AND AFRICA: PENICILLIN-RESISTANT *S. PNEUMONIAE*



PRESSURES ON THE PRIMARY-CARE PHYSICIAN

Peer groups / prescribing and pharmacy advisors

Pharmaceutical
representatives

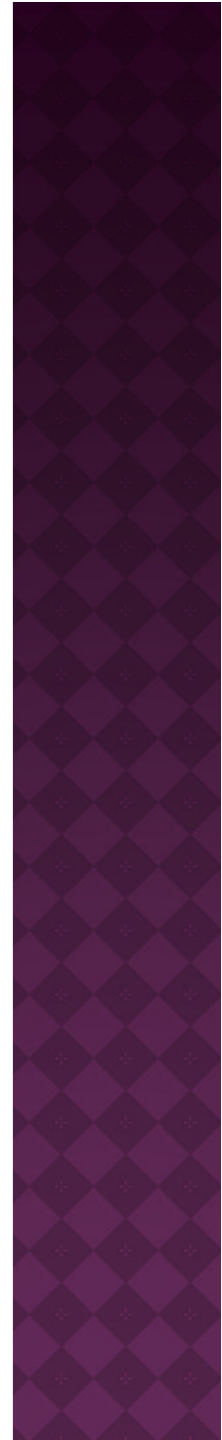
(Industry spends
35% of profits on
marketing)

Regulatory control
mechanisms

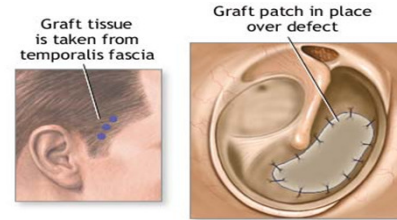


Patients'
demands
and
physician
aspirations

Hospital experts, formularies and guidelines



LITERATURE REVIEW



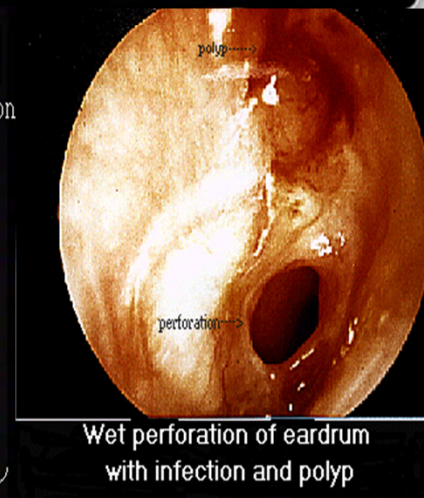
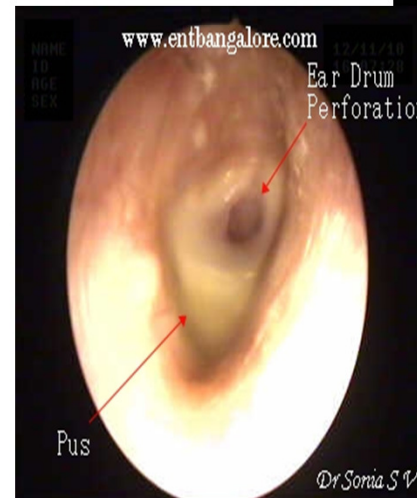
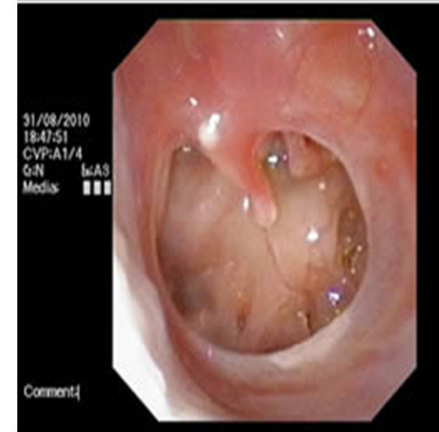
ADAM

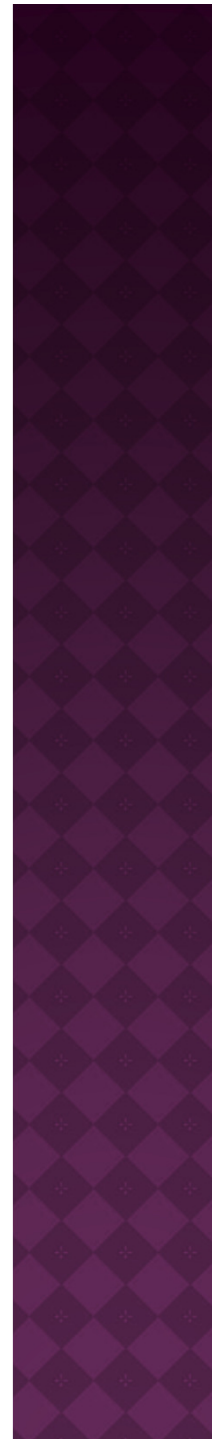
- CSOM prevalent worldwide
- 1878 Berthold; full thickness skin graft “myringoplastik”
- Tympanoplasty type I; common procedure
- Main aim in CSOM; repair, restore, eradicate-dry safe functioning ear(indications).
- Success ; Adults (60%-95%), Children(35%-94%).Sarkar 2009.
- Definition of a success varies among authors:
- Three-Six months post-op:

PROGNOSTIC FACTORS

- Patient
- Perforation:
- Aetiology, middle ear(wet/dry),
- status of opposite ear,
- Eustachian tube
- Technique:
- material
- Anaesthesia, approach
- surgeon, experience

Tear in tympanic membrane (eardrum)





OBJECTIVES

- ◉ To evaluate the role of different prognostic factors in drum take-up at six month.
- ◉ To define true global satisfaction success score in tympanoplasty(patient/surgeon) perspective.
- ◉ To propose global satisfaction success scoring system
- ◉ To compare global satisfaction success score rate among surgeon/patient based on indications of the operation.
- ◉ To propose a global satisfaction surgical outcome system.

METHODS

- ◉ Prospective and observational study
- ◉ Consecutive patients who underwent tympanoplasty; between 2005-2014
- ◉ Data collection
- ◉ Intervention: ear surgery by the same surgeon.
- ◉ Patients and surgeon satisfaction score, consent
- ◉ Drum status at six month post-op period.
- ◉ Statistical analysis ;SPSS, $p < 0.05$ significant.

SATISFACTION SUCCESS SCORING SYSTEM

Patient: indication	Satis (1)	Not satis (2)	Very satis (4)
Repair of drum Hearing improvement Stop discharge Stop pain			
Subtotal: (16)			
Surgeon: Indication	Satis (1)	Not satis (2)	Very satis (4)
Repair Perforation Closure(ABG)<20dB Middle ear aeration Ossiculoplasty Overall satisfaction			
Subtotal (20)			
Grand Total (36)			
A minimum of 9 for success satisfaction score between patient/doctor to grand total 16/20 points to assess and score success rate.			

DEFINITION SUCCESS AT SIX MONTHS POST-OP

- An intact TM(drum take-up) at 6/12.
- ABG closure, hearing improvement < 15dB, AB < 20dB.
- Middle ear aeration as part of good outcome.
- (Defined by surgeon no comment from the patient a bias assessment.)
- Success must be defined based on indication: hearing improvement, safe ear, eradication of disease, aeration of middle ear. It must be based on standard scoring system 😊

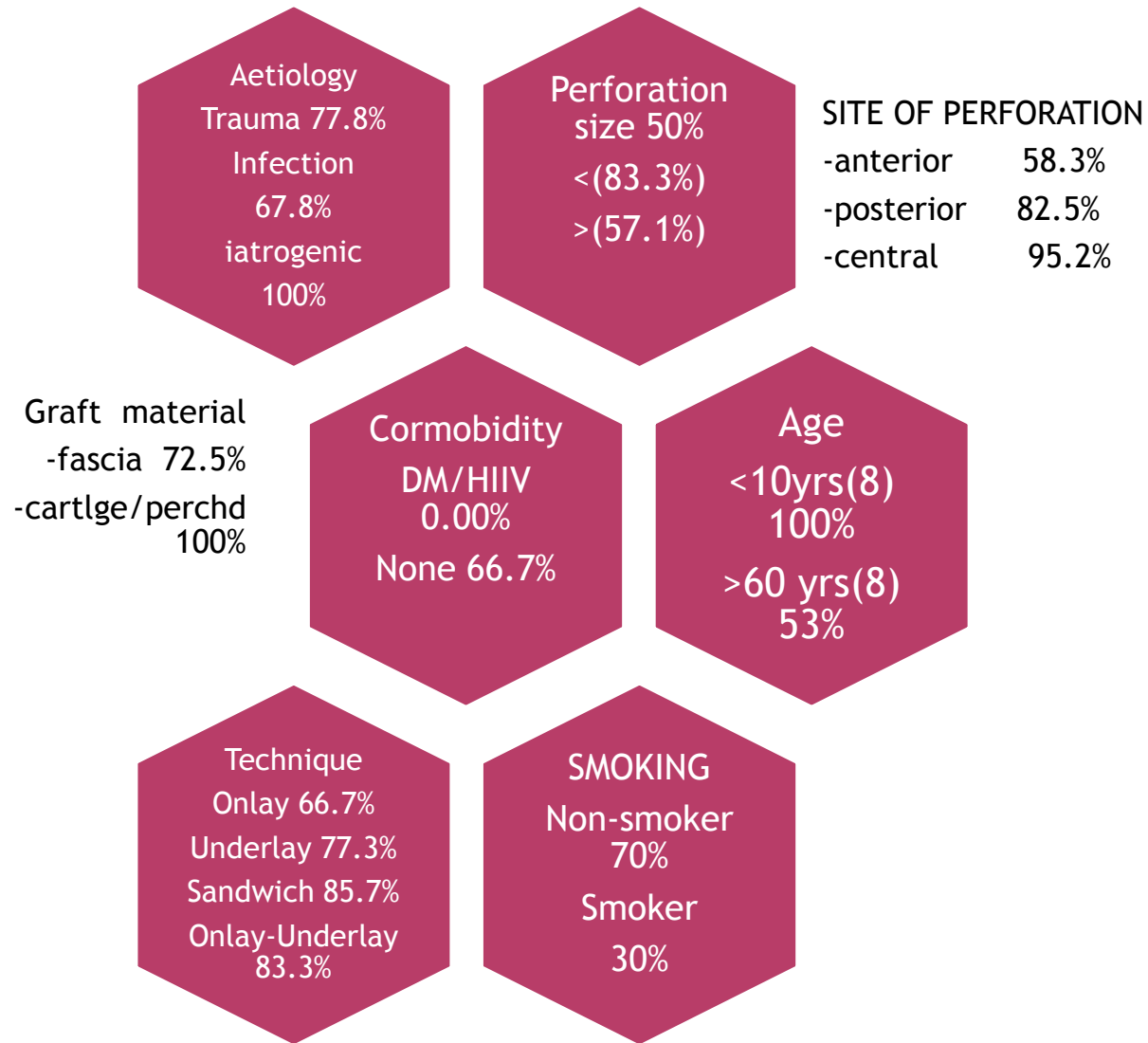
RESULTS



SUCCESS SURGICAL OUTCOME SCORE



(S) SUCCESS SURGICAL FACTORS



(NS) SUCCESS SURGICAL FACTORS

Dry or wet canal (wet 77%/dry 78%)
Middle ear mucosa status(normal 68.5%,infected68.4%)

Status of the contralateral ear (health 69%,infected 68%)
Income status (<R20/2 US dollar 70%,>2US dollar 66.7%)

Antral drainage(not done 69.6%,done 66.7%)
Site left 62.7%,right 73.7%

Approach ;EA 63.6%,PA 69.4%,TC 76.9%

Gender (F) 61.7% (M)77.1%

Eustacian tube,Anaesthesia,Surgeon

DISCUSSION

Factor	Yes	No	Unclear	Comment
Age	Sarkar, 2009 Berger, 1997 Adkins, 2005 TSHIFULARO M 2011	Sarkar,2009 Burger, 1997 Podoshin, 1996 Glasscock, 1973 Albera, 2006		Mixed opinion, Age does not matter extreme ages have poor outcome (very young and very old)
Size	Adkins, 2005 Lee, 2002 Denoyele, 1999 Tshifularo 2011	Singh, 2005 Pignataro, 2001		Mixed opinion size does not matter <50% better than >50% perforation
Site of perforation	Lee, 2002 Lin, 2008 Tshifularo 2011	Singh, 2005 Pignataro, 2001		Mixed opinion site does not matter Anterior perforation technical difficulty (worse outcome) Posterior/inferior have better outcome

Factors	Yes	No	Unclear	Comment
Middle ear status Wet/dry	Uyar, 2006 Tos, 1986 Albu, 1998	Sarkar, 2009 Berger, 1997 Podoshin, 1996 Glasscock, 1973 Lin, 2008 Sade, 1981 Caylan, 1998 Tshifularo 2011		Mixed opinion Dry for <3/12 better Status wet/dry no effect Higher take-up in wet ear
Status of contralateral ear	Uyar, 2006 Ophir, 1987 Kock, 1990 Sarkar, 2009 Lin, 2008	Chandrasekhar, 1995 Vartiainen, 1997 Sarkar, 2009 Lin, 2008 Albera, 2006 Singh, 2005 Pignataro, 2001 Tshifularo 2011		Mixed opinion Status plays no role; bilateral myringoplasty have been done successfully
Graft material	Lin, 2008 Tshifularo 2011			Worse outcome with temporalis fascia
Income status	Onal, 2005			Higher income better success than low income

DISCUSSION CONT

Factor	Yes	No	Unclear	Comment
Technique onlay/underlay	Lin, 2008 Tshifularo 2011			Onlay has better success than Underlay
Anaesthesia	Lin, 2008		Tshifularo 2011	Local anaesthesia has worse prognosis
Surgical approach	Lin, 2008	Tshifularo 2011		Post/Retro Auricular has a better success rate
Eustacian Tube status		Lin, 2008	Tshifularo 2011	Difficult to assess Eustacian Tube function and make a comment
Smoking	Onal, 2005 Becarovski, 2001 Tshifularo 2011			Affect healing of the graft(vascularity) Induces cough which may displace the graft during recovery period
Surgeon	Onal, 2005			Senior/experienced surgeon better success

SATISFACTION SUCCESS SCORE PATIENT/SURGEON

Very satisfied success score 94%
Patients/Surgeon

Satisfied success
score

83% Patients

17% surgeon

Not satisfied
success score

63% surgeon

38% patients

CONCLUSION

- ◉ There is no agreement on significant success surgical outcome factors however many prognostic factors has been identified. Secondly there is no standardized tympanoplasty operation and different definition of success in tympanoplasty in the literature.
- ◉ There is a strong correlation between a surgeon and patient; very satisfied success score 94% .
- ◉ However satisfied success score 83% patients/17% doctor(personal critique) score-surgical outcome score(84%).
- ◉ Our definition of TRUE GLOBAL SUCCESS :SURGICAL OUTCOME SCORE plus SATISFACTION SUCCESS SCORE-patient/surgeon) is based on total(overall) surgeon/patient satisfaction success score in relation to agreed indications for surgery(INDIVIDUALIZE) patient and surgical success outcome score.
- ◉ Satisfied success score increase surgical outcome from 84% to 94% TRUE GLOBAL SUCCESS (surgical outcome score and satisfaction success score)