



CLINICAL APPROACH TO RETROGRADE PERI-IMPLANTITIS – A LITERATURE REVIEW

NADIA BASHARAT, BDS; THOMAS G. WIEDEMANN MD, PhD, DDS
DEPARTMENT OF ORAL AND MAXILLOFACIAL SURGERY - NYU DENTISTRY



ABSTRACT

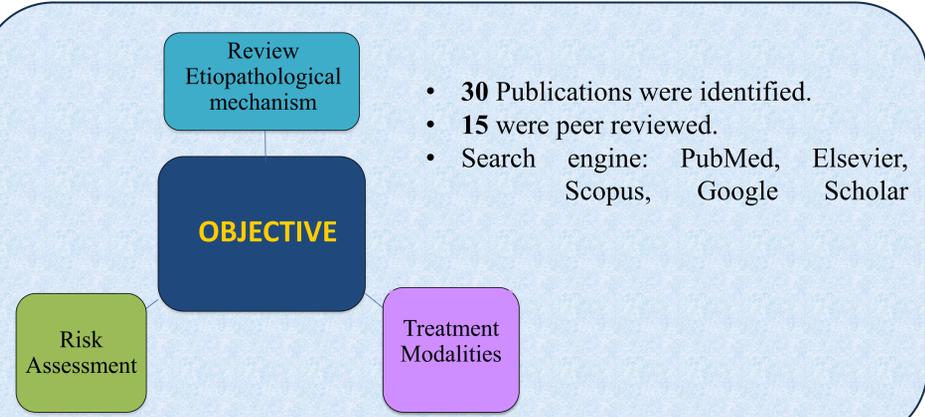
Currently there is no uniformly accepted definition for retrograde peri-implantitis (RPI). It can be described as a **primary microbial inflammatory** condition that affects only the apical portion of an osseointegrated implant which retains normal Bone – Implant - Contact (BIC) in its coronal portion. First described by **McAllister in 1992**.

OBJECTIVE: The purpose of this study is to review etiopathological mechanisms, risk assessment and treatment modalities of this type of periapical implant bone loss.

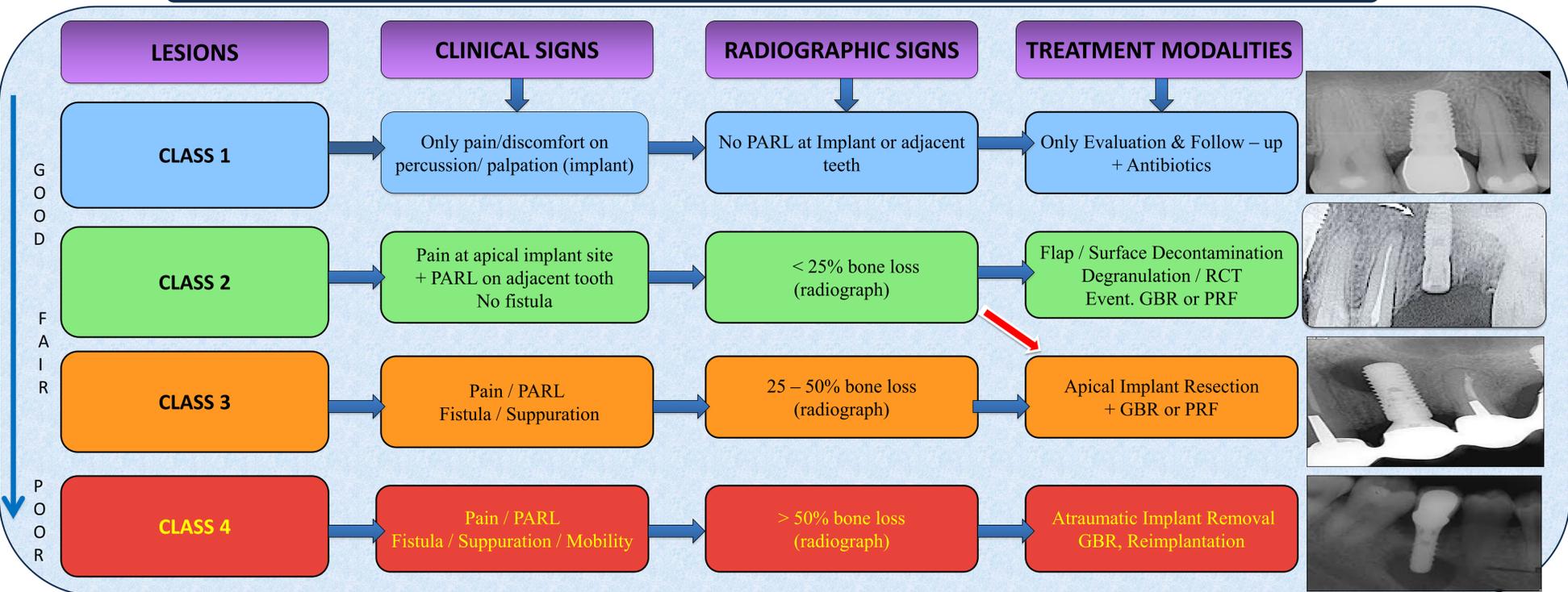
RESULTS:
•Prevalence of RPI is relatively low.
•There is a **lack of a classification** system and a **treatment algorithm**.
•Therapeutic options include antibiotics, implant apical resection eventually including apicoectomy of endodontically affected adjacent teeth, open flap debridement, bone grafting or laser treatment of surgical site before implant placement.

CONCLUSION: Implants affected with RPI most often remain osseointegrated. Considering the pathogenesis, prevention of RPI could easily be accomplished, if careful preoperative assessment of the implant bed and adjacent teeth is performed.

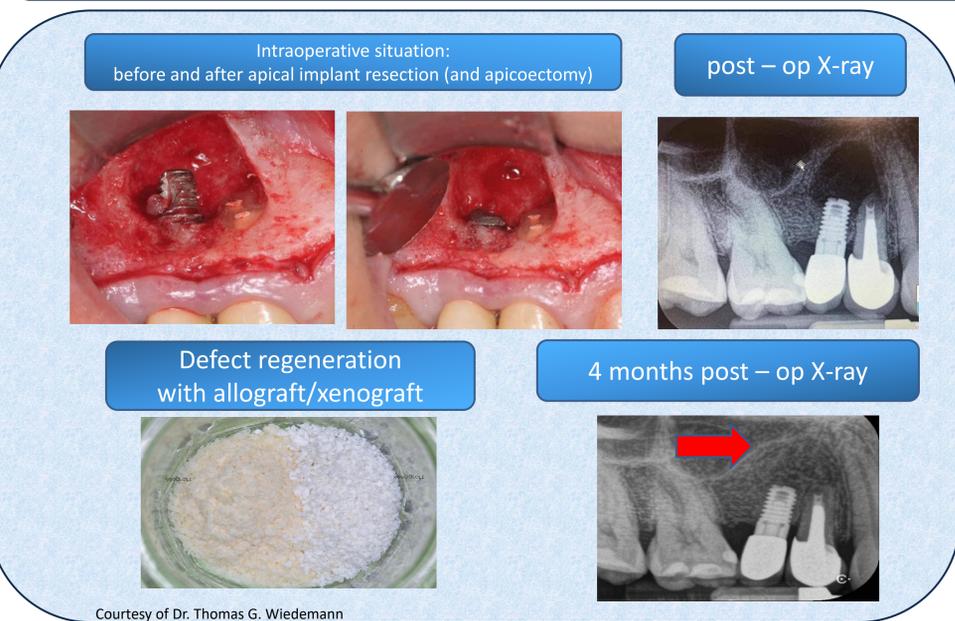
MATERIALS & METHODS



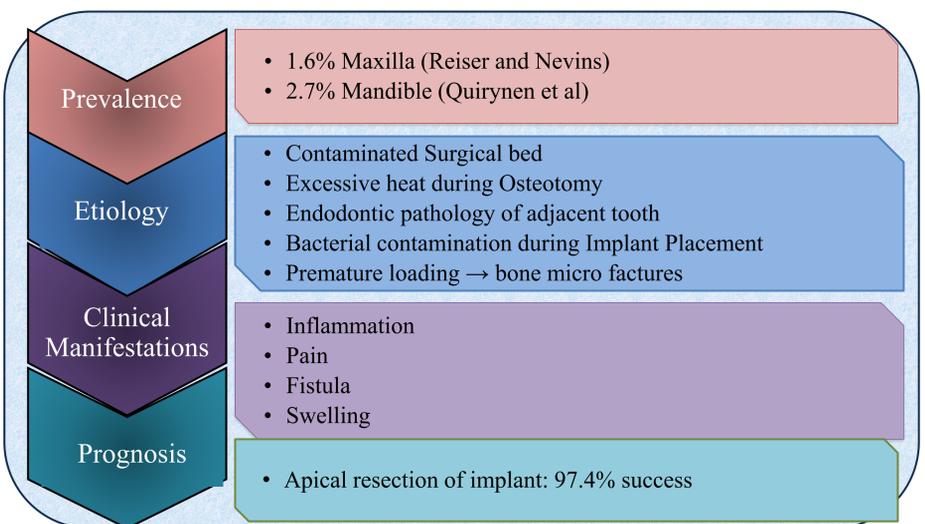
PROPOSED CLASSIFICATION AND ALGORITHM FOR RPI LESIONS



SURGICAL TREATMENT OF RPI



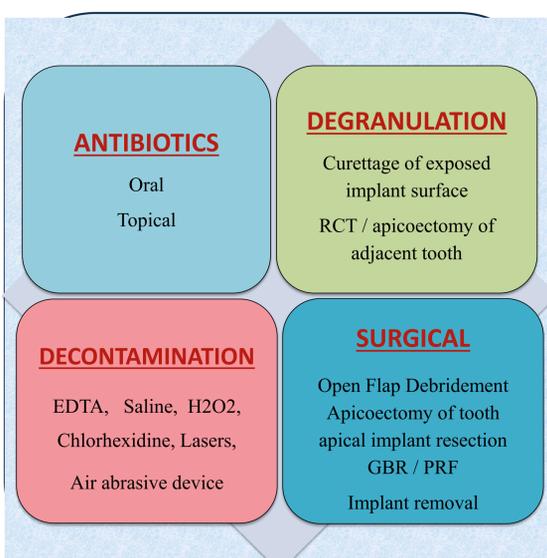
RESULTS



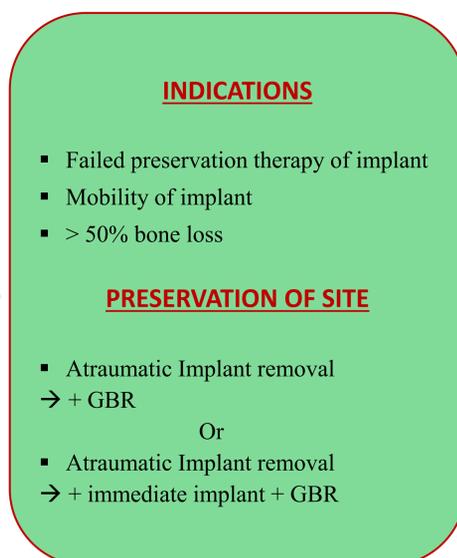
CONCLUSION

- Prevalence rate of RPI is very low – 0.26%
- **Etiology** of RPI – mostly associated with endodontic pathology of adjacent teeth.
- **Prevention** of RPI – easily accomplished by careful pre-op assessment of implant bed and adjacent teeth.
- **Treatment** recommendations:
 - Conservative approach: antibiotics and follow up
 - Surgical approach: implant preservation through open flap debridement – removal of implant apex– bone grafting or implant removal
- **Prognosis: Apical resection of the implant and GBR : 97.4% success rate v/s other treatment options: 75% - 90% success rate**
- > 50% bone loss and / or implant mobility: Removal of Implant is suggested

PRESERVATION OF IMPLANT



REMOVAL OF IMPLANT



REFERENCES

