Transcript of audio summary of "Is Peri-Implantitis Curable? From Dental Clinics of North America 63 (2019) 547-566 (Authors: Mohanad Al-Sabbah and Luciana M. Shaddox)

What is peri-implantitis?

Since 2017 the classification of peri-implant conditions is as follows:

1. peri-implant health,

Peri-implant health is characterized by absence of peri-implant signs of soft-tissue inflammation and there's no further additional bone loss following initial healing and bone remodeling

2. peri-implant mucositis,

Peri-implant mucositis is characterized by the presence of peri-implant signs of inflammation, but without additional bone loss following initial healing

3. peri-implantitis,

The criteria for diagnosing of peri-implantitis are:

a. peri-implant signs of inflammation

b. Radiographic evidence of progressive bone loss (>= 2 mm) 1 year after insertion of implant-supported prosthesis

c. Increasing probing depth compared with probing depth after prosthetic treatment

4. peri-implant soft- and hard-tissue deficiencies

Peri-implant soft-tissue and hard-tissue deficiencies may result from a whole host of local biological and mechanical factors and systemic conditions.

Peri-implantitis can be further classified as mild, moderate, and severe according to probing depth, bone loss, and presence of bleeding and suppuration

Prevalence and risk factors

One report indicates that mucositis may be found around half of implants after 10 years

It is really hard to quantify the prevalence of peri-implantitis because of methodological variations between studies.

One of our recent contributors to Oasis asserted that it is more commonly found than one might expect. One thing for sure – peri-mucositis (which is reversible) precedes peri-implantitis

Some of the big risk factors for peri-implant diseases are – smoking, diabetes, previous history of periodontal disease and poor maintenance.

Prevention and maintenance

The process of activation and reversal of mucositis is very similar to that with gingivitis. Subgingival biofilm disruption on a regular basis is essential to avoid initial inflammation (peri-mucositis).

Instruments, such as titanium scalers, regular sonic and ultrasonic scalers with plastic tips, or piezoelectric scalers with carbon or plastic tips, can be used around implant abutments and seem to be safe with regard to subgingival biofilm disruption.

There is a lack of a standard preventive measure with demonstrated efficacy to preserve peri-implant health.

One thing for sure is that periodontitis should be treated before implant placement and that a good periodontal maintenance protocol is essential before and after implant placement.

Management of peri-implant diseases

The are many surgical and surgical treatment modalities available

Non-surgical approaches

For peri-implant mucositis, mechanical therapy (with or without adjunctive use of antiseptic rinses) is usually the initial treatment of choice. The antiseptic strategies include using chlorhexidine, essential oils, triclosan and tetracycline fibres.

For peri-implantitis, there is not a great deal of good quality literature that demonstrates efficacy of particular approaches and there is controversy about how to decontaminate implant surfaces.

Mechanical debridement is still key, but the literature is not showing great evidence for adjunctive methods like air abrasion or lasers.

Local application of antibiotics like Doxycycline and Minocycline does seem to improve clinical parameters in cases of peri-implantitis.

Surgical approaches

Surgery does tend to be used for more severe cases, but there is not an agreed threshold of severity to indicate when surgery should be performed.

Again, the literature doesn't allow us to thump our chests about the efficacy of surgical approaches to treating peri-implantitis -because of low sample sizes, marginal treatment differences, and the small overall number of clinical trials.

The treatment of peri-implantitis remains controversial, and no standard of care has been defined to date. The anatomy of the bone defect and its configuration might be the most important factors in predicting treatment outcomes following regenerative approaches.

To wrap-up

Is peri-implantitis curable? The answer is no. We do not “cure” it, we (can only hope to) manage it.

Prevention is the best form of treatment of peri-implantitis. Thus, following implant placement, patients should be closely monitored with regular recalls to evaluate periodontal and implant health, and compliance with oral hygiene. If peri-implant disease manifests itself, the peri-implant mucositis stage of the disease is the best time to diagnose the problem and reverse it.