

Dr. Debelian- 3rd day first lecture notes

Different bacterial flora in retreat cases vs. initial endo

Bacteria contained in abscess of endodontic origin

P. intermidus

P. endontalis

P. gingivalis

E. nucleatum

Peptostreptococcus species

All are sensitive to pen g and amoxicillin

DON'T use metronidazole by itself, as it will knock off anaerobes, but facultative aerobic bacteria will survive and flourish.

Walton et. Al Endotopics 2004

Concentrations of yeast increased in retreat cases.

7-18% in infected root cases, less than 1% in primary infection

In immunosuppressed patients, can be as high as 20%

Associated with refractory cases

Bacteria in retreat cases usually gram + streptococci

Microflora of obturated teeth

69% facultative anaerobes

78% enterococci

Ecological determinants in endodontically treated teeth

Bacteria can stay dormant until leakage occurs for years, then take off when leakage, apical or coronal, occurs

Carbohydrates are the usual food substrate that will start them up again

Extraradicular infection

Tronstad, Barnett (never liked that guy ☺), Riso K., Slots J. 1987

Root canal therapy had little effect on the flora of the extraradicular infection

Bacterioides intermidus dominate

Sulphur granules present in 25 % of cases.

(fred: you were a coauthor here, feel free to correct anything I fornicated, or better yet, post the reference)

Sunde, Olsen, Debelian, Tronstad JOE 2002

79% of extraradicular infections contained gram +, 61% staphylococcus

Immunologic response to extraradicular infection mediated by macrophages and t cells

The healing process of the extraradicular lesion varies from case to case and may take months or even years to achieve.

Potential for creating bacteremia (bugs in the bloodstream)

Tooth extraction 100% of the time, and large numbers of bacteria

Third molar surgery- 55% of the time

Root scaling- 70% of the time

Endo- 50% of the time, but the numbers are very low (very few organisms)

I'm assuming tooth extraction meant infected and 3rd molar surgery meant prophylactic removal in teeny bops, but for a clear explanation, contact Debelian and not me! I'm only the scribe.

Organisms from endodontic origin are primarily anaerobic- debelian, olsen, tronstad 1997

Sbe prophylaxis

1. use of sbe prophylaxis does not guarantee prevention of endocarditis
2. failures are not do to antibiotic resistance
3. regular dental checkups a must to prevent.

Vital case treatment- 90-98% positive prognosis

Failures due to bad asepsis (screwed up cleaning in the first place), coronal leakage

Chx- very important in retreat cases

Effect of caoh₂-

Direct kill of bacteria by OH- molecules

Blocks nutrients to bacteria

Neutralizes bacterial products

One step vs. 2 step treatment Sjogren et. al IEJ 1997

Found a statistically significant improvement in healing in 2 vs. one step.

Trope- found a 10% increase success in favor of 2 step in infected cases.

Refractory cases

Do culture and sensitivity- need to add antibiotics to the treatment regimen

May also need apical surgery

Use 3-4 months caoh2 changed every 4 weeks