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ADMINISTERING of ARESTIN
PERIODONTAL ADJUNT & MAINTAINANCE

The case study for the administering of Arestin, was a patient that was shared with me by a mutual classmate. After his entire dentition was ultrasonically, and hand scaled, he was then transferred to me to place the Arestin as he was a possible candidate. It is in adjunct to periodontal maintenance. The total time that I saw this patient amounted to approximately two hours. This limits me in terms of memory, to report on *all* of his prior assessments, diagnosis, plaque indices, and response to treatment, etc.

Dental care began in the Fall of 2019. At his first dental visit, treatment progressed only to the point of assessments and taking a full mouth series [FMX] as he was determined to be beyond the scope of care. He was dismissed from our clinic, and was given a copy of his radiographs and a referral to consult a periodontist due to his advanced periodontitis. Continuation of dental care at our clinic was contingent on the fact that if he was compliant with our recommendations, and sought treatment.

Approximately four month later in early March, he returned to our clinic to continue care The patient reported that he had periodontal surgery the week, following thanksgiving. The surgery involved tissue-flap, scaling and root planing

[SRP], an extraction of tooth #18, and at that sit he had a bone graft, as a prep for an implant. All of this costed him around three thousand dollars. Enough time had elapsed, so that he can proceed to the Phase IV of treatment. After his dental prophylaxis was completed by the other student, an appointed was reschedule a week later to assess the tissue's response to treatment, and to reassess areas for Arestin placement.

Despite having a FMS under one year, the student was given consent to retake four vertical bite-wing [BW] radiographs. This was taken by the student the day of his visit with me. The x-rays revealed one suspicious lesion on tooth #30, and both horizontal and vertical bone loss. These findings were discussed with the patient, and he was given a copy of his x-rays and a referral to see a dentist. Treatment began with me: he is a middle aged forty plus year old Hispanic male. A revision of his medical history revealed there were no changes since his visit one week ago, and there were no post-operative complication. He was not taking any medication at that time; he was a non-smoker and a non-drinker. He is ASA I as he had no medical condition, and no known medical allergies, to either Tetracycline, or Minocycline, the antibiotics in Arestin. Extra or intra orally there were no significant findings, and he brushes manually two times per day, and was compliant with the previously taught home of flossing at least once per day. Gingiva had slight inflammation, and the margins were rolled.

Prior to treatment the patient had obtained approval from the faculty for Arestin, and he signed the consent. Before administering the antibiotics, I discussed with the patient the rational for its application. That it was an adjunct to

scaling and root planing, as unresolved healing at certain sites of his gingiva, especially at pocket depth >5-7mm and bleeding on probing, indicated an infection. At these pocket depth, it is inaccessible to the toothbrush, and even with the most *through* dental prophylaxis, some infectious microbes still remained. These organisms Porphyromonas gingivalis, Prevotella intermedia, Fusobacterium nucleatum, Eikenella corrodens, and Actinobacillus actinomycetemcomitans, [aka Red Complex] which are associated with periodontal disease. They are anaerobic bacterias that are responsible for irritated gingiva, and they colonize and break down the tissue and the bone supporting the tooth structure. To destroy and/or arrest their activity, a localized application of antibiotic in the form of Arestin (minocycline hydrochloride) microspheres, 1 mg capsule at specific site would suffice. His entire dentition was re-probed, and some areas seemed to respond to treatment with a 1mm difference, but overall most sites remained the same. Eight sites were chosen and approved, on both the mandibular and maxillary arch. These areas had horizontal bone loss and pocket depth measuring 5-7mm. Placement was demonstrated and supervised by a faculty. The area of the tooth # 18 with the bone graft was left undisturbed… no probing.

Before dismissal post-op instructions were given verbally and in written form. Information after treatment, he should avoid chewing hard, crunchy, or sticky foods (i.e., carrots, taffy, and gum) with the treated teeth for 1 week, as well as avoid touching treated areas. Also he should also postpone the use of inter-proximal cleaning devices [eg flossing] around the treated sites for 10 days after administration of Arestin. He advised that although some mild to moderate

sensitivity is expected during the first week after SRP and administration of Arestin, and would self resolve they should notify the clinic/dentist promptly if pain, swelling, or other problems occur. Also, he should notified to inform the clinic/dentist if any itching, swelling, rash, papules, reddening, difficulty breathing, or other signs and symptoms of possible hypersensitivity occur. The patient tolerated treatment well and recall was scheduled four week later, which would have been the first week in April. Unfortunately, due to the COV-19 pandemic, the dental clinic was/is closed…