

Dentist on Mars

Dental Emergencies and Dental Maintenance needs to be addressed for Space travel, since humans live in micro-gravity for several months to years (long distance travel or on the ISS). What if an astronaut has an abscess or fractures a tooth while on a mission? What if a pre-existing restoration or virgin tooth fractures? How can you maintain proper Oral Hygiene on long flights or extended stays on the ISS? What affect does micro-gravity have on the Oral Cavity as it relates to gingivitis, periodontal disease, and bone loss? Since teeth are housed in bone, what effect will weightlessness have on tooth support; in order to maintain proper bone density? or, does zero gravity affect Maxillary and/or Mandible bone density at all? After a permanent tooth is extracted, with no bone filler within the "socket", the bone at the extraction site will atrophy. HOWEVER, if you place an implant in the site of a previously extracted tooth, bone will not be lost.

It is imperative that we send that "FIRST

DENTIST IN MARS" to perform first response protocol through experimentation. Understanding the affects of tooth extractions (including bleeding time, healing time, infection rate, bone regeneration, bone degeneration, periodontal disease, and caries prevalence). It is in the best interest for space travelers to have a "Dental Emergency and Maintenance Protocol System" (DEMPS) available. Such a protocol is imperative for long distance space travel (Mars) or a working settlement including the ISS in space, This Protocol has EXTREME IMPORTANCE and BENEFITS to all those crew members that may have a Dental Emergency (the cost of "scrubbing" a mission due to a toothache would be MILLIONS of dollars). While strengthening the space program, the knowledge gained from micro-gravity tested procedures would help those who need Emergency Dental Care in Third World Countries. The aeronautic dentistry should be included in dental curriculum.

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