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Sports Medicine 2016 Comparative Study of Gnathopostural approach in sports medicine: Clinics and research

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## ABSTRACT:

Since the seventies and eighties, gnathologists developed different scientific studies for analyzing the correlation between dental occlusion and sports performance. Literature reviews underline how these studies bring many conflicting results; anyway, it seems to exist a correlation between dental occlusion and sports performance, not only because of an effect on muscle strength, but probably for the intervention of other dental occlusion influenced co-factors. (e.g. Postural control). Moreover, during competitions and training many professional athletes wear mouthguards to protect their stomatognathic apparatus and thus an individual mouthguard properly balanced could also be able improve their sports performance. Our clinical experience showed that athletes should consider the chance of having a complete dental analysis by a sports dentistry specialist in order to protect their stomatognathic apparatus also trying to have an improvement of their performance after a proper dental therapy using an appropriate mouthguard or occlusal splint or as an aid to physiotherapy in healing frequent painful symptomatology that prevents the athlete from having a correct and continuous training program. Studies made by the authors on athletes and air force pilots, showed the usefulness of the force platform and other instruments (ex. computerized analysis of occlusion, thermography) in the gnathopostural approach to sports medicine. In fact, the force platform is able to detect the influence of the mandibular position on the sway area and postural control of the athlete. Recent pilot studies from our group found that muscle force in the upper and lower limbs was not influenced by altered mandibular position. Regarding postural balance, it is widely accepted that the cervical region has a significant effect on postural control mechanisms in general. As the mandibular position is directly functionally related to the cervico-cranial region, further research is needed to explore these relationships and the possible effects on postural control. An inaccurate fabrication of mouthguards for protecting the stomatognathic system could unbalance the highly specialized postural system of these individuals, predisposing them to an even higher incidence of painful posture-related symptomatologies. Thus, all athletes should be individually and carefully analysed with clinical and instrumental analyses by a professional expert in sports dentistry and possibly treated with reversible occlusal treatments in order to evaluate the real effectiveness of an occlusal splint in improving postural structure and sports performance.

Postural seepage (PD) is waste utilized in bronchiectasis and lung boil. The patient's body is situated with the goal that the windpipe is slanted descending and underneath the influenced

chest territory. Postural waste is basic in rewarding bronchiectasis and patients must get physiotherapy to figure out how to tip themselves into a situation in which the flap can be depleted. It is done in any event multiple times day by day for as long as 30 minutes. It tends to be done in the night to lessen hacking around evening time (despite the fact that PD ought to be evaded after dinners) or in the first part of the day to clear emissions amassed during the night. Bronchodilators can be utilized 15 minutes before PD is done to expand its advantages. The most influenced territory is depleted first to forestall contaminated emissions spilling into solid lung. Waste time shifts however each position requires 10 minutes. On the off chance that a whole hemithorax is included, every projection must be depleted separately however a limit of three position for each meeting is viewed as adequate. The strategy is suspended if the patient grumbles of cerebral pain, distress, discombobulation, palpitations, weariness or dyspnea. Patients might be dyspnic after the different manuovers since the head-down position builds crafted by breathing, diminishes flowing volume and diminishes FRC

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