Title: Risk Assessment of Dental Erosion Among Competitive Swimmers In Alexandria, Egypt

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Dental erosion is irreversible loss of tooth structure caused by acids. Erosion constitutes a problem for competitive swimmers who spend a considerable length of time in pool water. Such sport might result in alteration of salivary parameters and might constitute a hazard on dental health due to the effect of chlorinated water. This study was aimed to provide a risk assessment profile of dental erosion among competitive swimmers compared to non-swimmers in Alexandria, Egypt. A cross sectional study was performed including the largest clubs in Alexandria, Egypt. 180 athletes were recruited, the sample was divided into 90 competitive swimmers and 90 competitive rowers aged from 11 to 25 years old. Basic Erosive Wear Examination (BEWE) system and Dental Erosive Wear Risk Assessment form (DEWRA) were used for recording erosive lesions and define the risk level, respectively. Stimulated saliva samples were collected before and after training session to assess alterations in salivary pH and rate. Pool pH was measured for all included swimming pools. Out of 180 athletes, 60% of swimmers and 25.6% of the rowers had dental erosion. Compeitive swimmers were at a higher risk of erosion comparaed to non-swimmers. Among atheltes who presented with signs of erosion, swimmers showed increased salivary pH and decreased flow rate after training while rowers presented with decreased values for both parameters. water samples from some pools demonestrated lower pH values below the permissible limits.

Biography

Hams Hamed has completed his MSc at the age of 28 years from Faculty of Dentistry, Alexandria University, Egypt. She has published 2 papers in reputed journals; Alexandria Dental journal and Easrtern Mideterranean Health Journal and has been working on upcoming researches on cariology and sports dentistry.

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