

Sports dentistry

The Academy for Sports Dentistry defines Sports Dentistry as "The prevention and dissemination of information on dental athletic injury and the encouragement of research in treatment of orofacial athletic injuries and related oral diseases, as well as the collection and the prevention of such injuries."

Maintenance

1. Wash after each use in cold/ lukewarm water.
2. Washing with hot water should be avoided.
3. Clean with toothbrush & toothpaste.
4. Should be stored in cold plastic container when not in use.
5. Should be washed prior to use.

MOUTHGUARDS

Prevention of orofacial sports injuries

1. Helmet
2. Facemasks
3. Mouthguards

Types of mouth guards

1. Jaw joint positioner
2. Anatomically designed

Other forms: Stock, Mouth-formed, Custom Fabricated



Orofacial Sports Injuries

1. Soft tissue laceration
2. Contusions
3. Root fractures
4. Dental fractures
5. Luxation
6. Avulsion
7. Concussion
8. Dentoalveolar fractures
9. Mandibular dislocations

Heat Pressure Laminating

2 or 3 sheets of material are chosen for placement

Placement of layers is done one by one

Layers are laminated under high pressure (10atm) and temperature

First layer is slimmer & shows better adaptation

It is then trimmed and polished at margins and finished

The next layer is placed following the same procedure

Cast with mouth guard is placed on platform of pressure lamination machine

2nd layer is left under pressure to cool on cast for 15 minutes

Mouth guard is then modified, trimmed & margins are polished again

Trial of mouth guard in athlete's mouth to check for equilibrium between occlusal surface of mouth guard & teeth of opposite jaw

Vacuum Forming Technique

Alginate impression is taken

Pour impression with dental stone

Impression is removed & cast is trimmed

Cast is centered on vacuum former

5.5 inch square sheet of polyvinyl acetate polyethylene is placed on vacuum machine

Heated until sheet shows 1-2 inches sag

Softened material is compressed over cast for approximately 2 minutes.

When it is cooled excess material is trimmed & palatal region is cut in U shape with utility knife

After soaking in water, mouth guards are removed from cast & trimmed

Final finishing & polishing with rubber wheel or polishing stone is done

Lastly, flame the mouthguard lightly with an alcohol torch

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References



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