

一种尖牙控轴直丝托槽的结构设计

潘 杰¹ 赵 君² 姜 宁³ 陈 骊¹

(1. 上海市口腔病防治院正畸科, 上海 200031; 2. 上海交通大学医学院附属第九人民医院正畸科;
3. 上海交通大学医学院附属第九人民医院口腔颌面外科正颌正畸中心, 上海 200011)

【摘要】 目的 设计一种用于错殆畸形的正畸治疗的新型托槽——尖牙控轴直丝托槽, 对其结构设计和应用原理进行探讨分析。**方法** 定性设计矫治器的结构, 托槽两个对角旋转翼与另两个对角翼可以通过旋转轴发生转动, 能灵活选择放入弓丝前不锈钢丝结扎托槽与放入弓丝后弹性结扎托槽等结扎方式。**结果** 设计出一种尖牙正畸控轴直丝托槽, 其特征是两对角托槽翼与另两个对角翼可以通过旋转轴发生转动, 从而改变托槽槽沟的高度及宽度。**结论** 使用尖牙控轴托槽时, 可以通过结扎尖牙控轴托槽的合龈翼来选择采取不同的矫治系统。

【关键词】 正畸 轴倾度 托槽

DOI: 10.11752/j.kqcl.2015.01.07

Structural design of the canine axis adjustable straight wire bracket

Pan Jie¹, Zhao Jun², Jiang Ning³, Chen Li¹

(1. Department of Orthodontics, Shanghai Stomatological Disease Center, Shanghai 200011; 2. Department of Orthodontics, College of Stomatology, Ninth People's Hospital, School of Medicine of Shanghai Jiao Tong University, Shanghai 200011;
3. Centre of Cranio-facial Orthodontics, Department of Oral and Maxillofacial Surgery, Ninth People's Hospital, School of Medicine of Shanghai Jiao Tong University, Shanghai 200011)

【Abstract】 Objective To design a new type of bracket: canine axis adjustable straight wire bracket, which is used to treat malocclusion, and analyse its structure and principle in this article. **Methods** The structure of axis adjustable bracket is consist of two sets of diagonal bracket wings, which can take a rotation around the axis between each other and be adapted to various archwire ligation methods. **Results** A new type of axis adjustable bracket was designed to have two sets of rotary diagonal bracket wings, and doctors can change the height and width of bracket slot by different ligation ways and choose different orthodontic correction systems. **Conclusion** When using the canine axis adjustable straight wire brackets, we can choose different orthodontic correction systems by different ligation ways.

【Key words】 Orthodontics Axis inclination Straight wire bracket

正畸托槽根据矫治器的矫正原理不同, 大致分整体牙移动技术和差动牙移动技术两种^[1]。整体牙移动技术托槽, 如 MBT 直丝托槽, Roth 直

丝托槽等; 另一种为差动牙移动技术托槽, 即先倾斜牙齿, 再竖直牙齿, 这样可以更快移动牙齿、更好控制直抗^[2], 如 Begg 托槽、Tip-Edge 托槽等。

整体牙移动技术是目前世界上固定矫正技术的主流, 能够在三维方向上有效的控制牙齿, 但

基金项目: 国家自然科学基金 (81200815)
通信作者: 赵君, E-mail: shuimupanda@sina.cn