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| **Name:** |
| Samuel Chen |
| **Group:** |
| 10B-4 |
| **Pathology Question:** |
| How does the immediate placement of a removable prosthesis affect the healing of extraction sites? |
| **Report:** |
| Immediately after tooth extraction, the resulting sockets in the extraction sites undergo the healing process. First, hemostasis and coagulation form a stable clot to prevent blood loss and initiate the healing process. Inflammation occurs within the first few days of extraction to further facilitate healing. Finally, proliferation of new bone formation and tissue form the final stage of the healing process with tooth extraction.  For patients seeking dentures, healing will typically take 4-6 weeks, after which a preliminary impression can be taken to begin the permenant denture construction process. This, however, is very time consuming. Many patients prefer not to spend this time edentulous, and instead will opt for immediate or transitional dentures. These are dentures that can be applied immediately following tooth extraction and can preserve the OVD and general esthetics of the patient pre-extraction.  Placing dentures immediately after extraction can promote healing by providing a physical barrier over the sites of extraction. This protects the socket from opposing forces including those of food and the tongue, and can protect tissues within the sensitive extraction site. However, immediate or transitional dentures also run into the same issues as conventional dentures. Without proper oral hygiene and denture maintenance, denture stomatitis from fungal or bacterial infections are a potential risk factor. Furthermore, temporary dentures require relignment as the oral tissues change shape with decreased inflammation. Improperly fitted dentures can lead to irritation and ulceration of extraction-site tissues.  Overall, if adequate care is taken with immediate dentures, they can have a minor therapeutic benefit to extraction site healing in addition to their psychological benefits to recently edentulous patients. |
| **References:** |
| Caputi, S., Murmura, G., Ricci, L., Varvara, G., & Sinjari, B. (2014). Immediate denture fabrication: a clinical report. *Annali di stomatologia*, *4*(3-4), 273–277.  de Sousa Gomes, P., Daugela, P., Poskevicius, L., Mariano, L., & Fernandes, M. H. (2019). Molecular and Cellular Aspects of Socket Healing in the Absence and Presence of Graft Materials and Autologous Platelet Concentrates: a Focused Review. *Journal of oral & maxillofacial research*, *10*(3), e2. <https://doi.org/10.5037/jomr.2019.10302>  Kubo, Cinthia Sawamura, et al. “Relining of removable dentures: A literature review.” Revista Sul-Brasileira de Odontologia, Vol. 11, No. 2, 2014, pp. 192-98.  Phoenix, R. D., Cagna, D. R., DeFreest, C. F., & Stewart, K. L. (2003). *Stewart's clinical removable partial prosthodontics*. Hanover Park, IL: Quintessence Pub.  Sisson J, Boberick K, Winkler S. Conversion of a removable partial denture to a transitional complete denture: a clinical report. J Prosthet Dent. 2005 May;93(5):416-8. doi: 10.1016/j.prosdent.2005.02.026. PMID: 15867749. |