

Platelet-rich fibrin (PRF): an autologous packing material for middle ear microsurgery.

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Abstract:

To assess the use of PRF prepared using an optimised protocol in middle ear surgery as a substitute for conventional packing products of animal origin such as collagen derived from porcine skin. A retrospective study of 108 patients in whom optimised PRF was used exclusively to pack the external auditory canal or middle ear. The effectiveness or harmlessness of the PRF was evaluated by assessing a range of parameters. A morphological comparison was also made of PRF produced using the Choukroun procedure and our procedure. The success rate of the repair of the tympanic membrane one year after the surgery was 45/48 patients. In 5 of 63 patients in whom a retro-auricular approach and wall-up technique were used, granuloma was observed along the incision in the ear canal. Granuloma was not seen in any of the 23 patients undergoing a procedure with an endaural approach. The use of a material prepared from patients themselves and not of animal origin has numerous advantages in terms of biocompatibility and safety, without any adverse effect on the success rate for general middle ear procedures. The protocol is simple and does not prolong the time spent by the patient in the operating theatre. The Choukroun technique should be modified to prevent excessive failure rates in PRF processing.