

The Utility of monitoring microsurgical flaps

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BACKGROUND: The microsurgical flaps are increasingly used in head and neck surgery. When you do one, especially in a flap without standard clinical monitoring, it is necessary to find a way of monitoring these so that in case of failure, can be done an early intervention on it. One method of monitoring that is the use of implantable Doppler to verify patency and flow of the anastomosis.

METHODS: descriptive prospective series of patients in whom reconstruction was performed with microsurgical flap in Clinica Alemana between March 2013 and March 2015, using an implantable Cook-Swartz Doppler Flow Monitoring System (Cook Vascular Inc, Vandergrift, Pennsylvania).

RESULTS: 20 patients with microsurgical flaps were recorded. Ten antebrachial flaps, 7 fibulae (4 with skin witness and 3 without), 2 anterolateral thigh faps and 1 rectus abdominis were performed. Six reexploration were done, 1 case was suspected clinically and by the change in the doppler signal, in 4 cases were clinically suspected and in only 1 case with the change in the Doppler signal. The findings in the operation room were edema flap in one patient, and five hematomas. There was no loss of flaps. Doppler monitor was used by an average of 9.5 days.

CONCLUSION: Doppler monitor does not replace clinical observation but represents a tool for decision-making in the postoperative period of this type of head and neck reconstructions.

Keywords: Doppler Effect, microsurgery, free flap