VERS AJET HYDROSURGERY: 7 YEARS OF EXPERIENCE IN ADULTS AND PEDIATRIC PATIENTS (P196)

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Rationale: Escharectomy is the gold standard procedure for burn debridment, however, newer methods (ie, rotating head dermabrasion, Versajet®) were tested with good results (1,2,3). The Versajet hydrosurgery system (Smith & Nephew, London, UK) is a device based on the Venturi effect (4), able to cut and aspirate debris contemporarily. The aim of this work is to report our experience with the use of Versajet® from july 2008 to now. On previous studies (5) we voluntarily excluded pediatric patients because then, convinced by further works, (6) we started to use Versajet® also in children.

Materials and Methods: Patients were recruited and randomly assigned to Versajet or hand-held dermatome escharectomy. As in previous studies made by the same Department, we evaluated the 1) time for complete debridment and 2) the efficacy of Versajet in reaching the correct dermal plane. Secondary end points were the assessment of postoperative pain (evaluated with the visual analog scale), adverse effects, complete healing times.

Results: A total of 36 patients (including 8 children) were analyzed in two homogeneous groups of 14 (Versajet) and 12 (escharectomy) patients. All of them received satisfactory debridment but the Versajet procedure was faster (p=0,4) and was more easy to reach the desirable plane.

Conclusions: The device is extremely versatile, the operator can regulate the tissue excision of the water jet adjusting its pressure and velocity and modifying the hand piece direction and pressure. The final debridment is the same as the classic escharectomy except that it was faster, safer and more precise. In our experience the gold standard for the utilization of Versajet® are deep burns (third degree) with a soft escara and especially escharectomy’s revisions to treat with high precision inhomogeneous zones. However in pediatric patients for superficial burns is recommended the use of dermabrasion.