Double Team Approach to Brachial Plexus Surgery
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OBJECTIVES
Brachial plexus surgery constitutes a long and complex procedure. The aim of our study is to assess the advantages of having a double operating team throughout the duration of this surgery.

METHODS
Our study retrospectively reviewed 6 patients affected by brachial plexus injury divided in two groups: 1) 3 patients who underwent a single team approach and 2) 3 patients treated with a double team approach

Inclusion criteria were patients with brachial plexus palsy. Data analyzed for each patient were the operating time for every surgical step, position of the single and double team at the operating table and outcomes. Costs and benefits of every surgery were also analyzed. Values were compared to assess any statistical significance. Demographic data showed sex ratio Male:Female 4:2, mean age 27.8 years old (range 6-51). Mean follow-up was 34 months (range 5-72 months)

RESULTS
The mean operating time was 280 minutes with surgery operated by a single team performing between one and two nerve anastomoses without nerve graft harvesting and 256 minutes in the patient group operated on by two teams in which three anastomoses were performed along with sural nerve harvest. (Fig.1) Position of the two teams at different moment during the procedure are illustrated. (Figs.2-3) Clinical outcomes were checked periodically. (Fig.4) No perioperative complications were noted. Hypothermia, bleeding and infections resulted improved and were directly related to the reduced surgical time.

Cost-benefit ratio has shown a mean total amount saved of $8,183 per procedure and operative time reduced almost 50% (Table 1)

CONCLUSIONS
Brachial plexus surgery performed by a double team allows the reduction of the operating time and thus minimizes the drawbacks associated with lengthy surgery such as perioperative bleeding and infection. Our data overlap what has been previously published in the literature.¹

Reimbursement of two teams appears therefore justified by decreased complications rate and surgical time. The reduced surgical time with the double team approach allows to save $8,183 per procedure when compared to the single team approach. Surgeon fatigue is another important factor to be considered in decreasing complication rates: microsurgical suturing is easier when performed at the end of a shortened intervention and shared by two senior surgeons. This approach improves the operating conditions and guarantees better outcomes.

Limitations of the study are the retrospective nature and the limited number of patients enrolled.

REFERENCES