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Mediterranean Council for Burns & Fire Disasters  
WHO Collaborating Center



International Association for Humanitarian Medicine  
Brock Chisholm

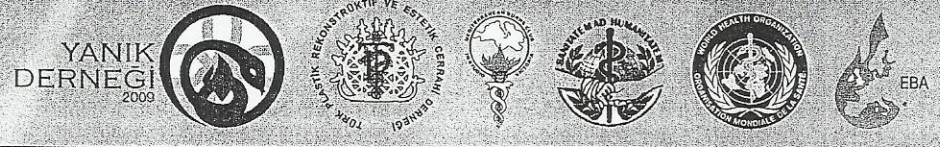


with special endorsement by

Turkish Society of Plastic Reconstructive  
and  
Aesthetic Surgery

&

Turkish Society of Burn Management  
and  
Prevention



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[Accepted:Poster Presentation] [Clinical]

Tumescent infiltration of lidocaine and adrenaline for the routine procedures of burn surgery

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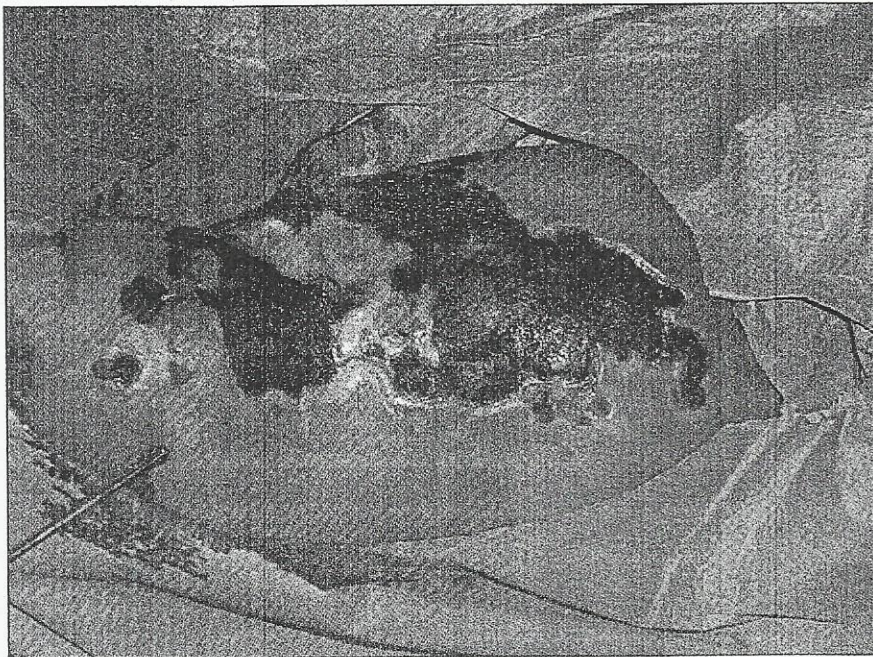
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**BACKGROUND:** Tumescent infiltration is a widely used type of regional anesthesia in cutaneous surgery. In this technique, high-dosage of lidocaine can be administered within the safety limit, leading to diminution in pain and bleeding during the operation. In this study, tumescent infiltration of lidocaine and adrenaline was used for the routine procedures of burn surgery involving escharectomy, debridement, tangential excision and skin grafting.

**METHODS:** In seventeen patients who had burned with scald and flame, tumescent infiltration was made prior to surgical procedures under either general anesthesia or intravenous sedation. After waiting 15 minutes, escharectomy, debridement of necrotic tissues, tangential excision of the burned skin, removing of the granulation tissue and harvesting of the skin graft were performed.

**RESULTS:** No complication occurred. All of vital signs remained within safety limits during the operations. Hemorrhage was minimal so that operations could be performed easily and fast. While removing the granulation tissue, very few bloodloss occurred so that both excision of the granulation tissue and skin grafting could be finished rapidly because of no need of hemostasis. Moreover, duration of the surgery considerably shortened. Neither hematomas nor bruising developed after surgery. As hematocrit levels decreased less than 3%, no blood transfusion required. Postoperative analgesia especially in first 8 hours was so satisfactory.

**CONCLUSIONS:** Tumescent infiltration of adrenaline and lidocaine is a simple, effective and safe technique which makes not only anesthesia on the large areas of the burned body surface, but also less bleeding, easy surgical dissection, hydrodissection, reduced postoperative swelling and bruising, which lead to fast, easy and painless burn surgery.



A full-thickness eschar, viewing at the time when tumescent solution was being given with a fine cannula.