The use of topical crushed tranexamic acid tablets to control bleeding after dental surgery and from skin ulcers in haemophilia

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Sarris *et al*. [1] recently reported in *Haemophilia* on the successful use of topical tranexamic acid in gynaecological surgery. Topical tranexamic acid has been shown to reduce postoperative bleeding in cardiac surgery [2]. Topical tranexamic mouthwa- shes are standard practice in dental surgery on patients with haemophilia and other bleeding disor- ders [3].

I report the anecdotal use of crushed tranexamic acid tablets for at least the last 5 years in our institution. Generally accepted regimens for coagulation factor replacement, factor eight bypassing activity (FEIBA®, Baxter) and recombinant activa- ted factor seven (NovoSeven®, NovoNordisk) are always followed. Tranexamic acid is available as intravenous or 500 mg tablets formulations in our hospital, but not as effervescent mouth washes. To cut costs and from anecdotal experience we have been crushing tranexamic acid tablets between two spoons and using the coarse powder.

For dental surgery, the powder of two 500 mg tablets is suspended in water. After dental surgery the patients swirl this suspension in their mouth before swallowing it. After tooth extractions, we often put crushed tablets onto wet cotton wool, put this over the cavity, and asked the patient to bite for half an hour. Our experience with roughly 30 patients has been successful in most cases. We have begun using topic thrombin sealants recently.

I recently used crushed tranexamic acid tablets on two skin wounds in non-surgical wards in a neigbouring complex, where intravenous tranexamic acid was not routinely stocked. The first case was a boy of 14 years, who had haemophilia A with inhibitors of 200 Bethesda Units. He had unfortunately undergone drainage of a posttraumatic testicular

haematoma. After a long treatment with FEIBA® and NovoSeven®, I began applying local crushed tranexamic tablets as well as the standard wound dressings. He had been taking tranexamic acid tablets by mouth for several weeks. There was no local reaction and the wound closed within a few weeks. The second case was a 20-year-old man from Lesotho with haemophilia A and chronic synovitis of his left knee. A shallow ulcer near the lateral aspect of the knee precluded a synovectomy because of possible infection. The improper dressing on ulcer irritated it. The oozing did not respond to a few days of intravenous factor VIII. In desperation, I applied a few crushed tranexamic acid tablets and the oozing stopped within fifteen minutes. The crushed powder was added to his revised skin dressings. The wound healed after a month and he has subsequently had a successful series of rifampicin synovectomies [4]. The use of sterile and properly formulated topical tranexamic acid is preferable. Based on this anecdo- tal experience, the use of crushed tablets might be an option in desperate situations in developing coun- tries. The likelihood of there ever being a prospective study, of topical use of crushed tranexamic acid tablets, is unlikely.

References

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