



USE OF TRANEXAMIC ACID IN ORTHOPAEDIC SURGERY

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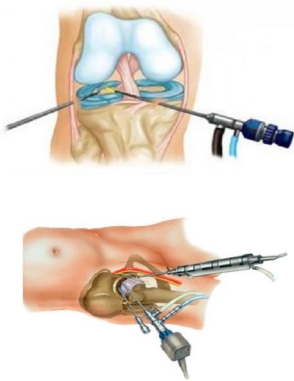
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BACKGROUND

Several studies show the association between administration of tranexamic acid (ATX) in orthopaedic surgery and a decrease in transfusion requirement of patients. In January 2014, a protocol using this drug in knee and hip surgery was implemented in our hospital.

PURPOSE

To analyze transfusion requirements in patients undergoing orthopaedic surgery who received tranexamic acid their side effects.



MATERIALS AND METHODS

Prospective study of all patients undergoing knee or hip surgery from 01/01/2014 to 30/06/2015. Data recorded were: name, medical record number, age, date of admission and surgery, orthopedic surgery type, preoperative hemoglobin and variations during hospital stay, transfusion requirement, discharge date, possible contraindications for the administration of ATX (specified in the protocol of the Hospital) and occurrence of deep vein thrombosis (DVT) as side effect.

Patients were obtained from Traumatology Service database, while transfusion requirements were obtained from Hematology Service registry.

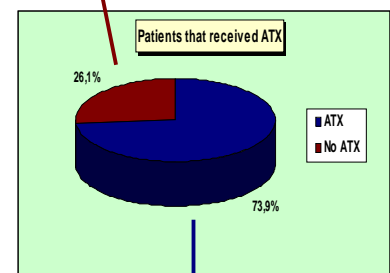
RESULTS

Of the 272 patients undergoing one of the revised surgeries, 201 (73.9%) received ATX, while the rest showed heart disease, previous stroke or blood disorders that contraindicated this use. 35.8% of patients who received it were men and 64.2% women, with an average age of 69.6 years. Most of them were subjected to knee arthroplasty (74.1%) and 25.9% to hip arthroplasty.

The average length of stay was 6.4 days (4-20 days) and the mean decrease in hemoglobin levels 3.6 g/dl.

In the group of patients receiving ATX, 19 (9.5%) required transfusions and received a total of 33 packed red blood cells. In the group without ATX, 14 patients (19.7%) required the administration of another 33 packed red blood cells. No patient developed DVT because of the administration of ATX.

19.7% required transfusions



9.5% required transfusions

CONCLUSIONS

Most patients undergoing knee or hip surgery in our center have met criteria for the administration of ATX, and transfusion requirements were significantly lower in this group compared to patients who did not receive the drug. So far there has been no case of DVT associated with the use of ATX, so we can consider it as a relatively safe drug and cost-effective because it is a low cost drug that reduce the requirements of packed red blood cells in this selected group of patients.

