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Background

Oral anticoagulants (OAC) play crucial role in preventing thromboembolic diseases. However, these medications may carry numerous problems and risks while applied. Patients taking oral anticoagulants may have higher risk of bleeding during a surgical intervention.

Purpose

Our aim was to analyze the risks that patients on oral anticoagulant therapy may have during their hospitalization and surgical procedure.

Materials and methods

Patients were recruited from the Traumatology Department, at the University of Szeged, Hungary, admitted with osteoporotic hip fractures. A retrospective analysis was performed for the period between January 2011 and August 2012. Data were recorded from the patient charts and documentation. Data comparison was made regarding the risks of patients on OAC and of patients not taking oral anticoagulants (control group).

Results I.

A total of 510 patients were enrolled to this study (133 males, 377 females), the mean age was 79.7±9.8 years (mean ± standard deviation). On admission, 49 patients were taking OAC (14 males, 35 females, mean age 80.9 ± 10.0 years), which was acenocumarol (figure 1). 119 men and 342 women (mean age 79.6±7.2 years) have been included in the control group.

Results III.

Complications during the surgical procedure and/or hospital stay occurred in 57.1% in the OAC group, and 51.8% in controls (table 1). During the hospital stay 53.1% of OAC group received blood transfusion, while 45.3% of the control group. Mortality rate was 8.16% in OAC patients versus 3.14% in the control group.

Figure 1. Demographic features

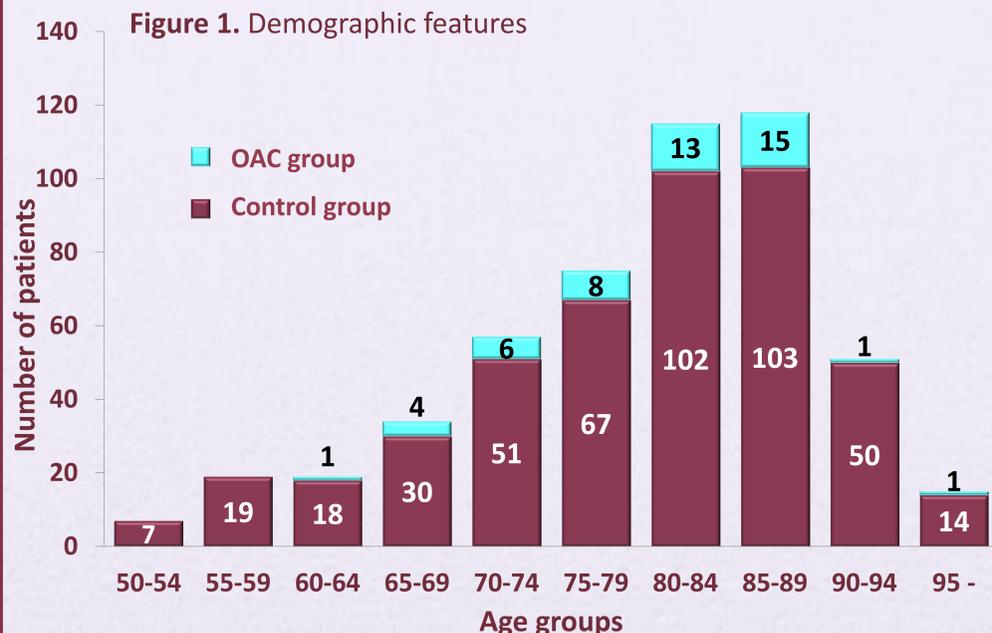


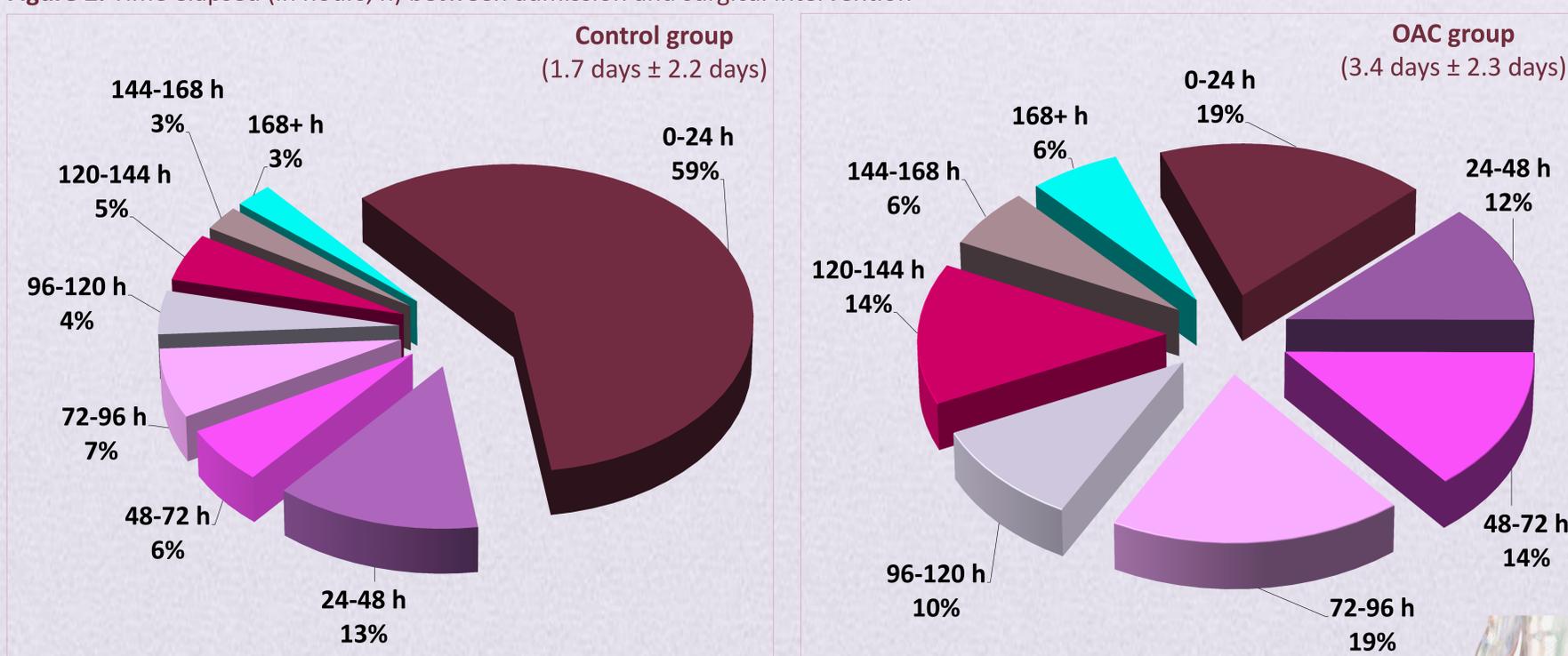
Table 1. Complications among patients with hip fracture

Complications	Control group (%)	OAC group %
Any complication	51.8	57.1
Pneumonia	1.3	2.0
Decubitus	7.8	10.2
Transfusion needed	45.3	53.1
before surgery	2.2	10.2
during surgery	17.8	20.4
after surgery	25.6	18.4
Mortality	3.5	8.2

Results II.

In the OAC group, more time elapsed between the admission date and the surgical procedure: 3.4 days (±2.3 days) versus 1.7 days (±2.2 days) in the control group, $p < 0.001$ (figure 2). At the same time, there was no substantial difference in the length of operation between the two groups: 1 hour 54 minutes versus 1 hour 50 minutes. Following the surgical intervention, the mean length of hospital stay did not differ significantly between the two groups (11.2 days).

Figure 2. Time elapsed (in hours, h) between admission and surgical intervention



Conclusions

However, the overall hospital stay did not differ significantly; considerable difference was seen regarding the length of time elapsed until surgery, complication rate and mortality rate between the OAC and control groups. Higher mortality rate draw our attention to frailty of patients receiving oral anticoagulant therapy.

