**CO 08   HIP FRACTURES: IMPACT OF THE IMPLEMENTATION OF AN ADDITIONAL FEE-FOR-SERVICE SURGERY REGIME**

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**Introduction:** Population aging is associated with an increase of hip fractures. Surgery is the most effective treatment and several studies have revealed that early surgical treatment reduces mortality and complications in these patients, with a 48-hour timing target.1 Since 2017, the percentage of hip fracture surgery performed within the first 48 hours after admission is a hospital quality indicator in Portugal. On January 1st, 2020, with the aim of reducing time to surgery, an additional fee-for-service regime for hip fracture correction was implemented in our hospital. This audit aims to evaluate the impact of this measure on time to surgery and in-hospital mortality in our center.

**Methodology:** This is a retrospective audit of 1837 patients with a diagnosis of hip fracture, discharged from our hospital between January 1st, 2017 and July 31st, 2022. Statistical analysis was performed using IBM SPSS Statistics software version 27.0, using Mann-Whitney and chi-square tests and logistic regression models; considering α=0.05. Results are presented as median [interquartile range], and absolute numbers and percentages.

**Results:** After January 1st, 2020, time to surgery was reduced from 114.8 [121.7] hours to 55.5 [75.9] hours (p<0.001) and the percentage of surgeries performed within the 48 hour target increased from 19.4% [n=174] to 43.4% [n=356] (p<0.001). Odds ratio of having surgery in the first 48 hours was 1.439 [1.087-1.905] for patients admitted after January 1st, 2020. Length of stay was also significantly reduced from 10[12] to 7[8] days (p<0.001). Time to surgery was longer in patients who died (114.0 [116.5] hours vs 82.6 [103.3] hours, p=0.057); but mortality was not associated neither with surgery after 48 hours (p=0.354) nor with admission before January 1st, 2020 (p=0.958). In-hospital mortality among non-operated patients was 47.9% [n=57] versus 3.0% [n=52], (p<0.001). Among 109 deaths, 47.7% [n=52] occurred in the postoperative period; 22.9% [n=25] were caused by severe conditions present at admission; 17.4% [n=19] were due to medical complications that arose after admission in patients initially fit for surgery and 10.1% [n=11] happened during pre-surgery optimization; only 1,8% [n=2] patients had been proposed for conservative treatment.

**Discussion and Conclusions:** Implementation of an additional fee-for-service regime proved to be effective in reducing waiting time until surgery, reducing the hospital stay and improving the hospital quality indicator. However, despite results from other studies showing the opposite, it did not translate into a reduction in global in-hospital mortality. Time to surgery was longer in patients who died (p=0.057); the lack of statistical significance might be due to low mortality among operated patients and could become clearer if we increase the size of the population. 19 patients died due to complications that arose while waiting for surgery; thus, we believe some of these deaths were preventable if patients underwent surgery sooner. These conclusions seem to reinforce the relevance in maintaining the additional fee-for-service regime.

**References:** Scientific Reports 2018 Sep 17; 8(1):13933.

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