



INITIAL RESULTS WITH ZOLEDRONIC ACID IN A REFRACTURE PREVENTION PROGRAM IN BRAZIL



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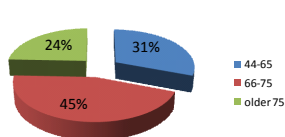
Objective: To describe the initial results with the use of zoledronic acid 5 mg in PREVREFRAT (Refracture Prevention Program).

Material and Methods: From April 2011 to February 2012, 77 patients with minimal trauma fractures were assigned to receive yearly intravenous zoledronic acid at a dose of 5 mg and calcium and vitamin D supplementation.

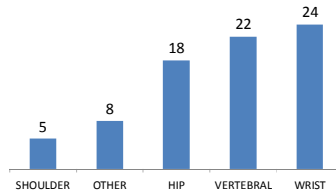
The patients features, fractures, risk factors, associated diseases, densitometric values related to fractures, vitamin D levels, adverse events and incidence of new fractures are reported.

Results: 71 women and 6 men with minimal trauma fractures received yearly intravenous zoledronic acid at a dose of 5 mg. The age (Graphic 1) and fracture (Graphic 2) distribution is showed.

The main fracture was wrist fracture (31.1%), vertebral fracture (28.6%), hip fracture (23.4%), shoulder fracture (6.5%) and other fracture (10.4%).



Graphic 1



Graphic 2

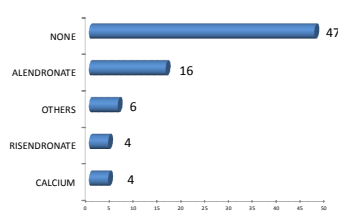
47 patients (61%) had no previous treatment for osteoporosis (Graphic 3).

According to WHO criteria, 70% were classified as osteoporosis, 26% as osteopenia and 4% normal (Graphic 4).

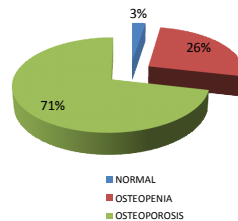
85.7% of the patients had vitamin D insufficiency or deficiency (Graphic 5).

40 patients (52%) had arterial hypertension.

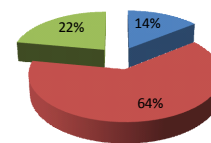
The main risk factors were fragility fracture (all patients), parent fractured hip (10), early menopause (9) and glucocorticoids (2).



Graphic 3



Graphic 4



Graphic 5

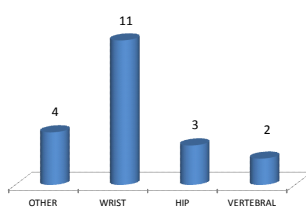
70.3% of patients with non-vertebral fractures had prior fractures.

55.5% of patients with hip fractures had prior fractures.

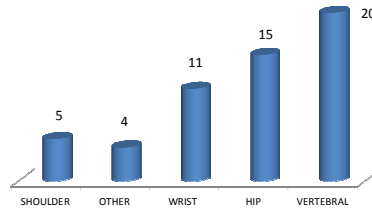
66.2% of patients had radiographic vertebral fracture.

57.1% of patients had more than one fracture.

In the classified normal group were 2 wrist fractures. The fracture distribution in the osteopenia (Graphic 6) and osteoporosis (Graphic 7) groups is showed.



Graphic 6



Graphic 7

All patients received paracetamol (1500/day, during 3 days) after the intravenous zoledronic acid dose.

Two cases of flu-like (the patients did not follow the prescription of paracetamol use) were found.

An adverse effect not directly related to zoledronic acid use was a case of avascular necrosis of the femoral head 19 months after femoral neck fracture.

Two secondary fractures occurred.

One patient (67yo, -3 SD L1-L4, -2.5 SD Femoral neck, Vitamin D 7.7) had a new wrist fracture 45 days after infusion.

One patient (82 yo, -4 SD L1-L4, -3.5 SD Femoral neck, Vitamin D 4.0) had a new shoulder fracture 74 days after infusion.

Conclusion(s):

The high percentage of patients with non-vertebral and hip fractures who had previous fractures reinforces that it is possible to decrease the rate of fractured hips, showing that liasson services as PREVREFRAT are rewarding.

Despite the short follow-up, the low rate of new fractures using a high persistence and compliance drug is encouraging.