

# SURGERY VS OBSERVATION

## CLINICALLY NON-FUNCTIONING PITUITARY ADENOMAS

### - A 20-year single centre experience

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## BACKGROUND

Clinically non-functioning pituitary adenomas (NFPAs) are among the most common pituitary lesions. Management includes surgery, radiation or observation. We aim to compare clinical characteristics and outcomes between patients submitted to surgery or expectant observation (E.O.).

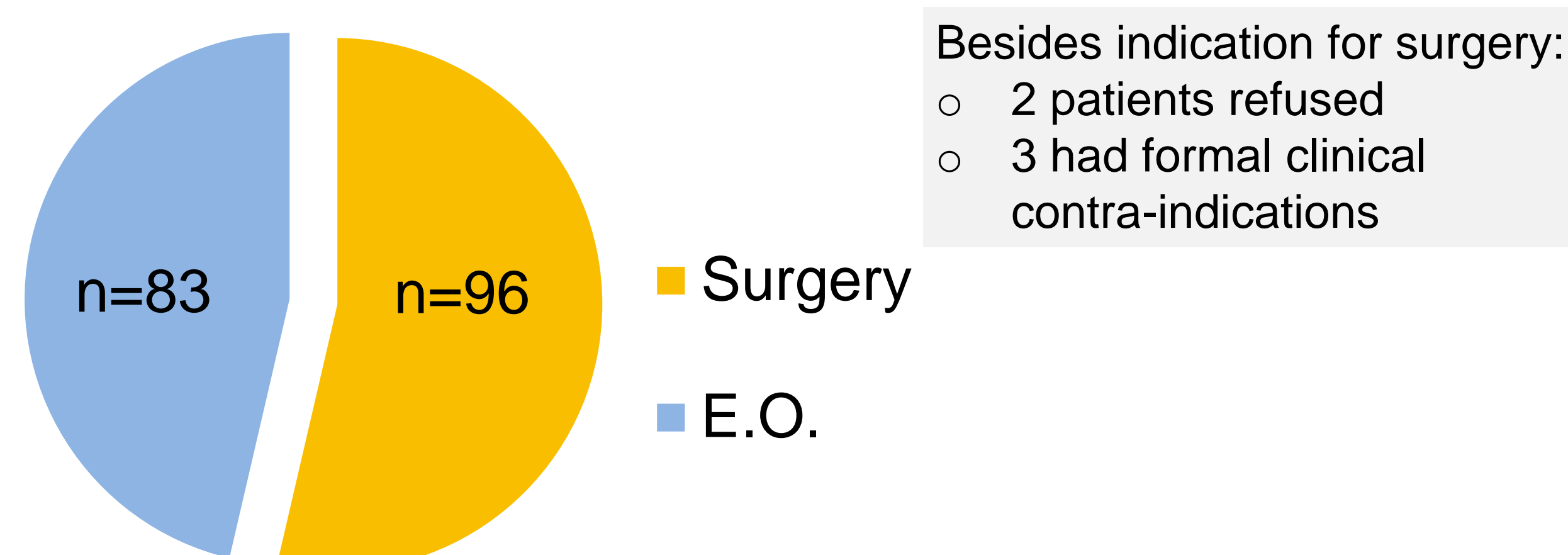
## METHODS

Retrospective review of 179 patients with NFPAs from 1996 to 2016. In our centre, there is only 1 pituitary surgeon and NFPAs patients are referred to surgery according to the presence of neurologic symptoms, mainly visual disturbances, and tumour growth. Statistical analysis: SPSSv20.

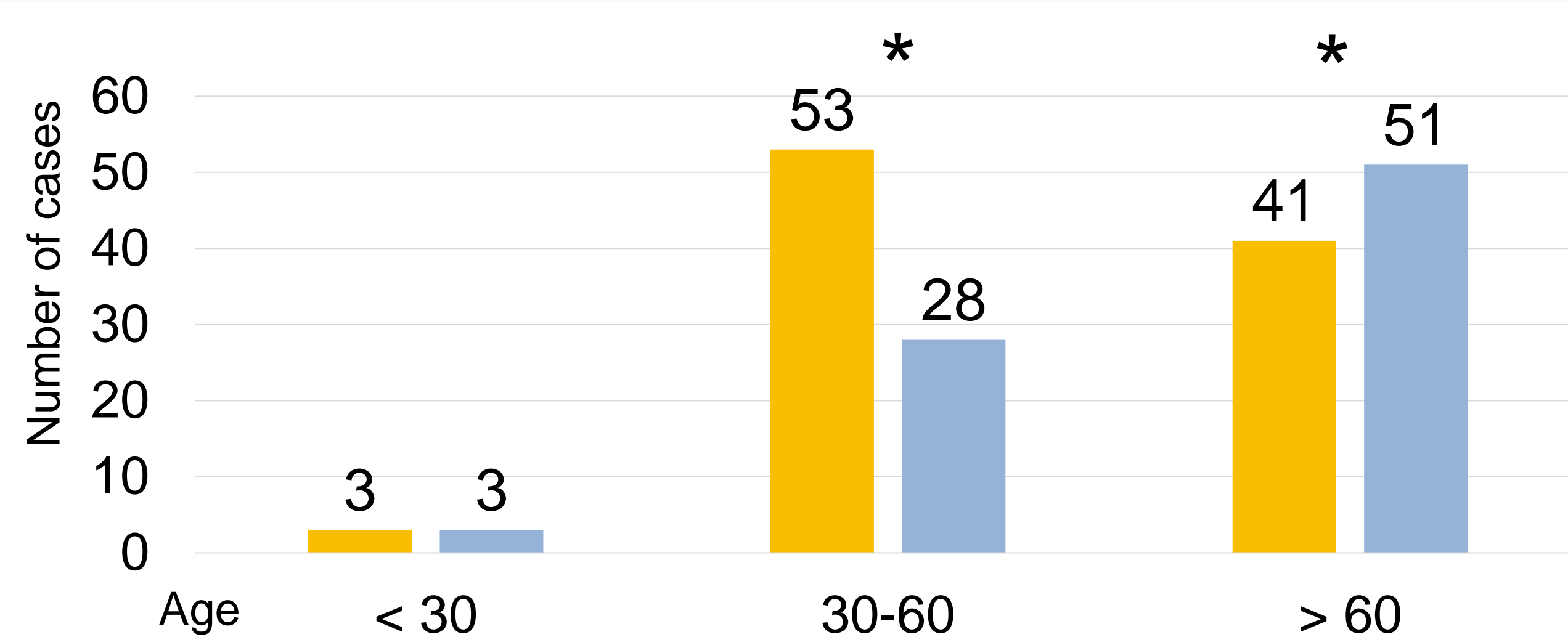
## RESULTS

### SURGERY VERSUS EXPECTANT OBSERVATION

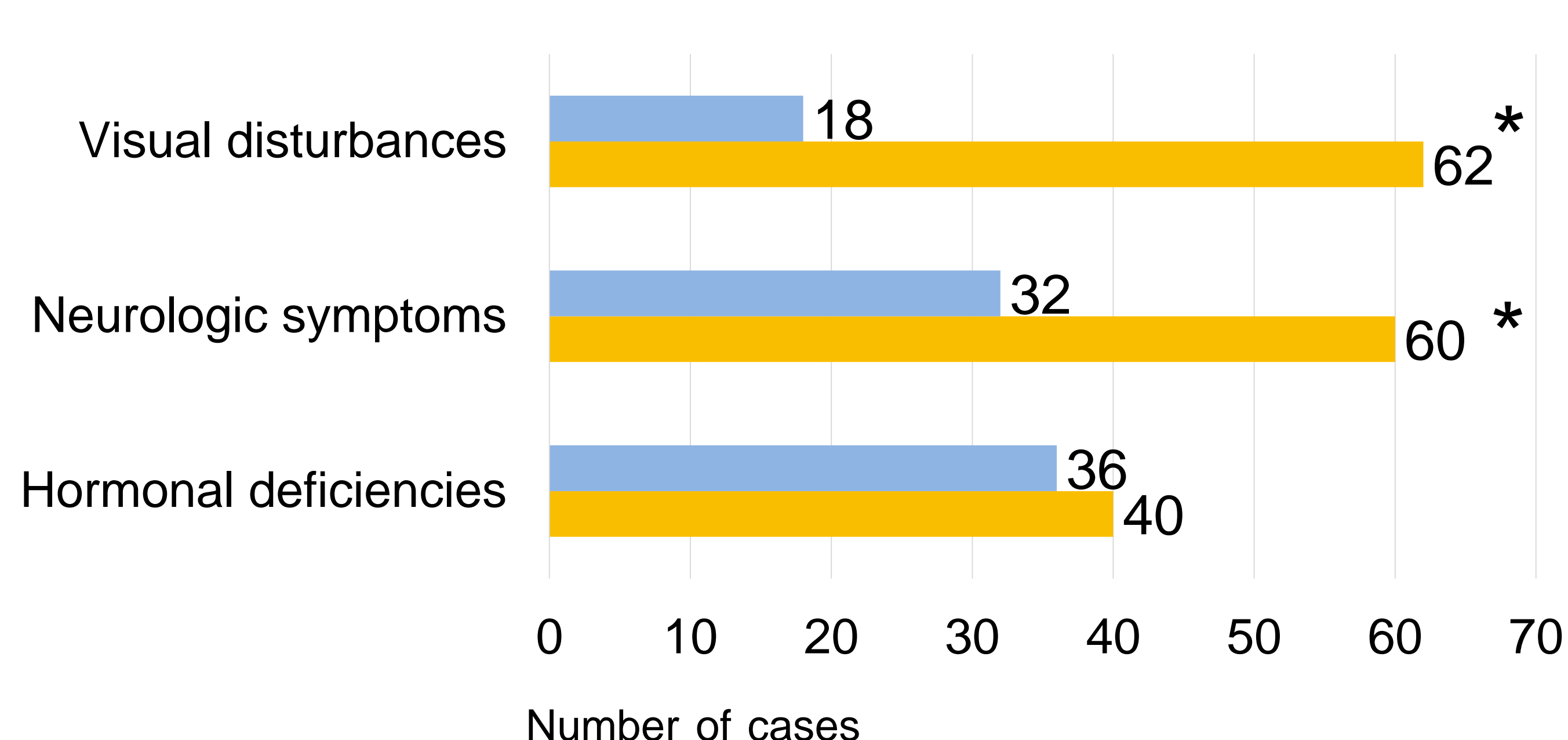
#### MANAGEMENT APPROACH: SURGERY VS E.O.



#### AGE AT DIAGNOSIS

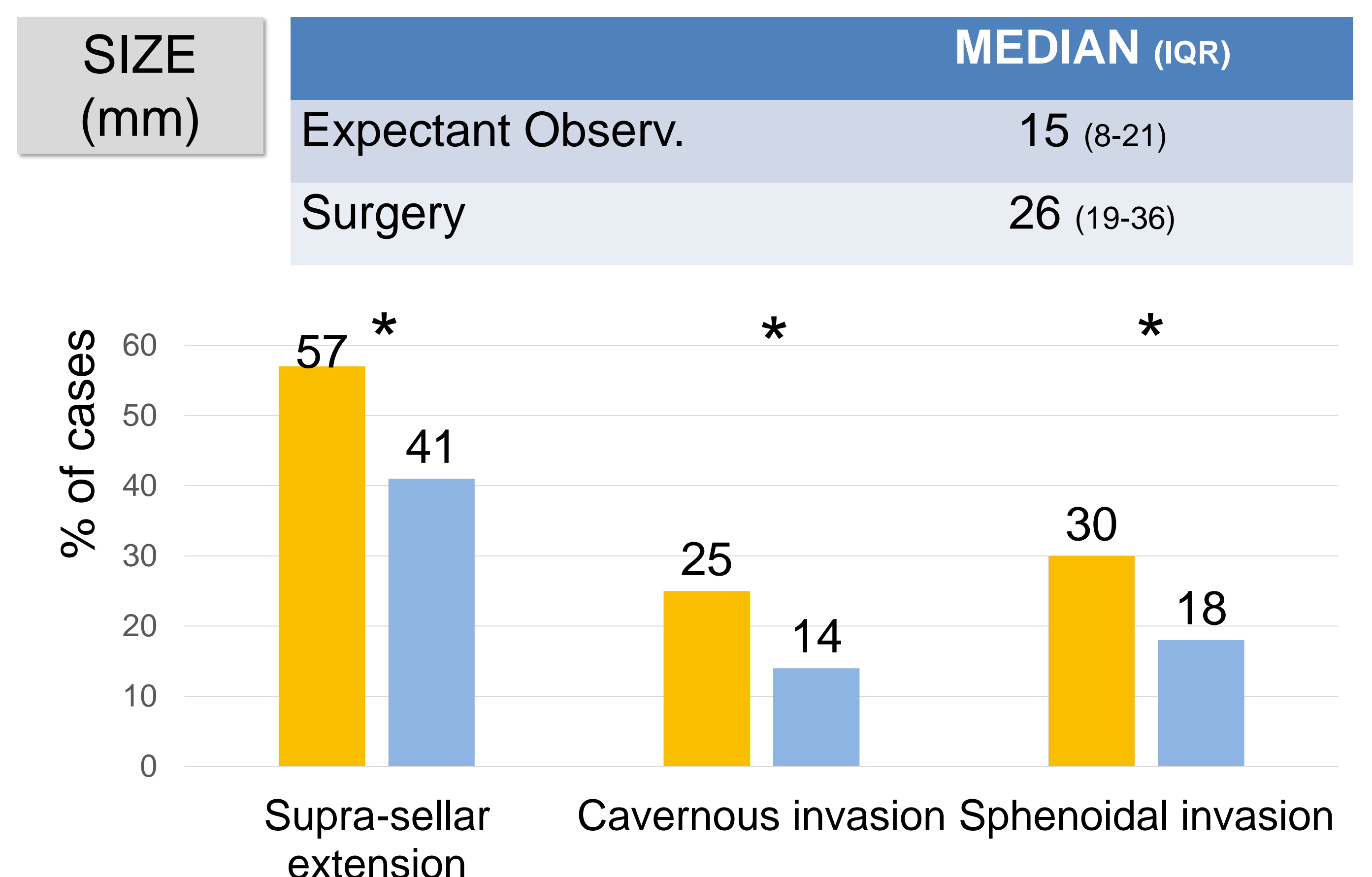


#### MANIFESTATIONS AT DIAGNOSIS



P significance level of 0.05  
Marked with \* if statistically significant

#### IMAGIOLOGIC CHARACTERISTICS AT DIAGNOSIS



#### FOLLOW-UP

Median follow-up time of 5 years (IQR 3-10)

#### Surgical group:

- 26% (n=25) required a second intervention
- 13% (n=12) were submitted to radiotherapy
- After surgery, 16% (n=11) had increased number of hormonal deficiencies and 12% (n=8) improved

#### Expectant Observation group:

- 4%(n=3) *de novo* hypogonadism
- 1%(n=1) *de novo* hypothyroidism
- No significant tumour growth
- None suffered apoplexia

## DISCUSSION

In our patients those that underwent surgery were in average 10 years younger, had more neurologic disturbances and bigger adenomas at presentation. In the E.O. group: 4 patients presented with new hormonal deficiencies, none had significant tumour growth or suffered apoplexy. Facing literature data, our population underwent fewer surgeries. Therefore, expectant observation may be a valuable option in selected NFPAs.