Aim: We aimed to investigate preoperative SSA treatment effects on the annual cost of all acromegaly treatment modalities and also effects on remission rates in acromegaly.

Methodology: The medical records of 135 with acromegaly who had been followed up at least 2 years after surgery in Cerrahpasa Medical Faculty, Istanbul University, between 2009-2016 were reviewed.

Results: The median follow up time was 51 months [IQR: 25-106 months]. Early remission defined according to third month values of patients who are under remission at 3rd month after surgery. But early remission defined according to sixth month values of patients who are not under remission at 3rd month after surgery. The early and late remission rates of all the study population were 40% and 80.7% respectively. The early remission rate of the preoperative SSA-treated group (%61.5) was significantly higher than SA untreated group (%31.3) (p=0.002). The early remission rate of the preoperative SSA-treated patients with macroadenomas (%52.5) was also significantly higher than SSA-untreated group (%23.5) (p=0.016). There were no differences between groups in terms of late remission. The median annual costs of all acromegaly treatment modalities in all study population was 15.684 TL (IQR: 1.307 TL-62.864 TL). The median annual cost of treatment for macroadenomas was significantly higher than microadenomas (17.077 TL vs 13.357 TL respectively; p=0.029). Preoperative SSA use in both microadenomas and macroadenomas didn’t alter the cost of treatment (p=0.398; p=0.466).

Conclusions: The preoperative medical treatment has no effect on the costs of acromegaly treatment. Although there is a beneficial effect of pre-operative SSA usage on early remission in acromegaly patients with macroadenomas, this effect didn’t persist at long term.

Keywords: Acromegaly, preoperative treatment, cost