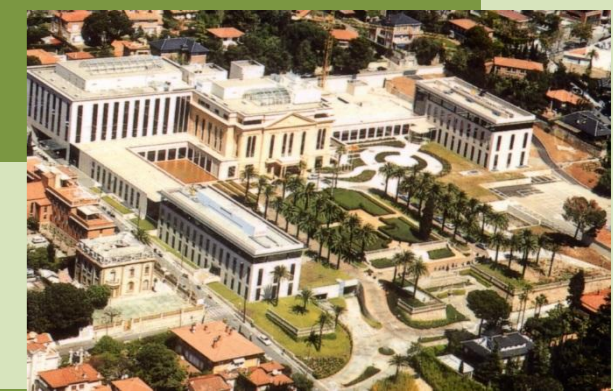


Comparative analysis of effectiveness between a patient-controlled analgesia morphine device and a sublingual sufentanil tablet system

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OBJECTIVES

Determine patients who may benefit from the use of sublingual sufentanil tablet system (SSTS) compared to patient-controlled analgesia morphine device (PCA-M). Analyze the effectiveness of SSTS compared to PCA-M.

METHODS

Observational and prospective study carried out in a private 300-bed hospital. The present study consists of two arms, on the one hand were selected patients with PCA-M and on the other, patients with SSTS. The study period was from September 2017 to March 2018. In the present study were collected the type of surgery and pain intensity with the analogous visual scale of pain (AVS: 0: no pain; 10: maximum pain) in various situations: prior to the PCA-M/SSTS and on days 1, 2 and 3 after to PCA-M/SSTS. The total AVS value (average of 3 days) of each patient was also determined. The AVS value was determined through a pharmaceutical interview. Study data were analyzed with SPSS program: differences of means through the T-test and Mann-Whitney test.

RESULTS

Fifty-one patients were collected in the PCA-M group and forty-four in the SSTS group. The average age in the PCA-M group was 55 years, while the average age in the SSTS group was 50 years, no significant differences between groups. Patients differ significantly between groups in the type of surgery: SSTS has been used more frequently in gynecological surgery but less in neurosurgery than PCA-M. Groups also differ significantly in the gender: SSTS has been administered mostly in women (65%) versus PCA-M (37%). The intensity of the pain prior to the use of the device was AVS 7 for both groups. On the first day after the device was used, the average AVS value in SSTS group was 5 and in PCA-M group 6 (p0.24). On days 2 and 3 the intensity of pain was lower in PCA-M group (AVS 3) compared to SSTS group (AVS 4) (p0.58). Sum of the AVS average value was 15 in PCA-M group and 14 in SSTS group (p0.28).

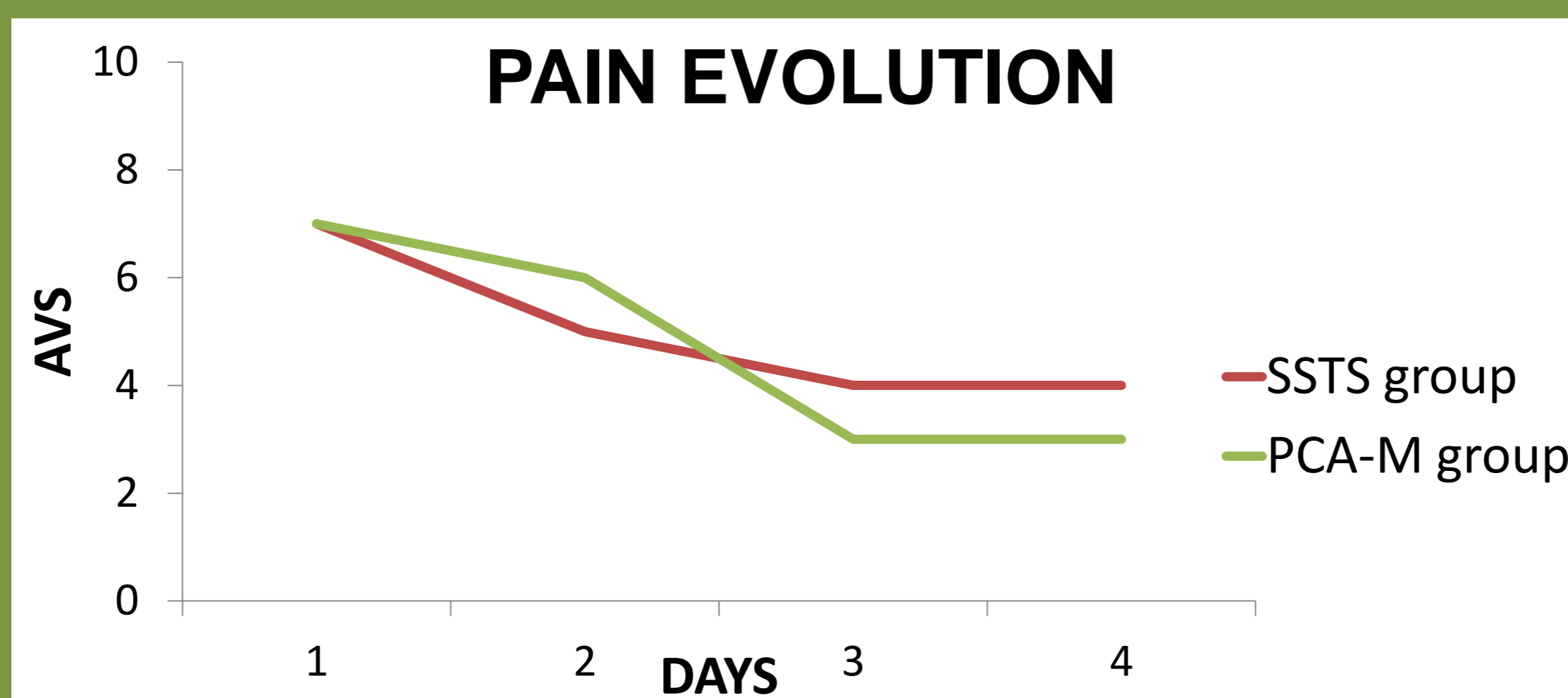


Figure 1. Pain evolution. No significant differences between groups

CONCLUSIONS

According to the present study, both devices have similar effects in reduction and management of post-operative pain through the AVS scale. In SSTS group slightly decreases pain faster than PCA-M group, without significant differences. SSTS has been administration mainly in gynecology, while the PCA-M device in neurosurgery