Objective: To verify if endoscopic TEP surgery performed by an experienced surgeon is a feasible procedure to treat incarcerated groin hernia.

Methods: This is a retrospective study in which we analyzed data from patients submitted to TEP endoscopic surgery for treatment of incarcerated and non-incarcerated groin hernias. The surgeries were all performed by a single surgeon. We obtained data on gender, age, ASA scores, BMI, hernia site and operating time. The two groups were descriptively analyzed and statistically compared in order to verify how similar the samples were. The operative times were also compared between the groups. The first 65 surgeries were excluded in order to evaluate the ability of an experienced surgeon.

Results: 323 surgeries were performed. 32 (9.9%) were cases of incarcerated hernias. In 306 cases (96%), the surgical approach used was TEP, the other 13 cases (4%) were operated by TAPP. All incarcerated hernias were operated by the TEP method. No significant differences on gender, age, hernia site, BMI and ASA score were found between incarcerated and non-incarcerated hernia patients. The operative time was analyzed by site of hernias (left, right and bilateral) and no statistical differences were found between incarcerated and non-incarcerated hernias.

Conclusions: 1) There was no significant differences on gender, age, ASA, BMI and site of hernias that could interfere in operative time in both groups. 2) The lack of significant statistical difference on operative time indicate that, for experienced surgeons, the technical difficulty is similar to operate incarcerated and non-incarcerated groin hernias by TEP.

Keywords: Herniorraphy; Inguinal hernia; Endoscopy; Learning curve; Operative time.