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The use of tacker and arthroscopy cannules in SILS cholecystectomy.

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Abstract
BACKGROUND:
The invasiveness of laparoscopic cholecystectomy was further minimized by reducing the number of incisions with the introduction of single-incision laparoscopic surgery (SILS) cholecystectomy. In order to solve the challenges posed by SILS cholecystectomy, an increasing number of techniques have been reported with the advent of new surgical instruments and refinements to existing technology. We describe, in this article, two new techniques that utilize existing instrumentations: an access and a retraction technique.
METHODS:
A consecutive series of 23 selected patients with symptomatic cholelithiasis underwent SILS cholecystectomy from April 10, 2009 to August 12, 2009. The overall procedure was similar to SILS cholecystectomy described in the literature. Hovewer, the access technique, with small-size arthroscopy cannules, was used to overcome the technical difficulty resulting from the collision of large-size caps of the laparoscopy trocars, and the retraction technique with a tacker was used to suspend the fundus of the gallbladder without taking the risk of gallbladder perforation.
RESULTS:
All patients were female, and the mean age was 34 years (range, 27-65). The body mass index of all patients was below 30 kg/m(2). The use of arthroscopy cannules provided a wider range of movement, and the retraction of the gallbladder was achieved safely with the tacker. These techniques reduced the operative times considerably.
CONCLUSIONS:
Most of the challenges posed by SILS cholecystectomy can be easily solved with simple technical modifications.