Usg guided drainage of liver abscesses

The purpose of this study was to investigate the efficacy of ultrasonically guided percutaneous needle aspiration (USG-PN) for the treatment of pancreatico-biliary diseases compared to other methods. This study involved 10 consecutive patients aged 2 months to 22 years. In all, 60 patients were treated with USG-PN, while 40 were treated with traditional percutaneous needle aspiration (USPNA) as a control. Inclusion criteria were as follows: USG-PN was performed under ultrasonographic guidance and real-time sonoangiography. The USG-PN group included 10 patients, and the USPNA group included 40 patients. Patients in the USG-PN group were treated with USG-PN using a USG probe with a 14-16 MHz linear array transducer. The catheter was introduced through a 6 Fr. pigtail catheter. The abscess cavity was aspirated using an 18G needle. In the USPNA group, 35 patients were treated with USPNA using a 14G needle, while 5 patients were treated with USPNA using a 16G needle. The number of patients who required additional treatments was compared between the two groups.

The study results showed that USG-PN had a higher success rate compared to USPNA (95% vs. 82.5%). The average longest diameter of the abscess cavity in the USG-PN group was 82 ± 30 mm, while in the USPNA group, it was 103 ± 40 mm. The mean volume of frank pus obtained from the abscess cavity in the USG-PN group was 14 ± 9 ml, while in the USPNA group, it was 34 ± 17 ml. The success rate of USG-PN in treating abscesses was significantly higher than that of USPNA, indicating a higher efficacy of USG-PN.

The study also showed that USG-PN had a lower incidence of complications compared to USPNA, with only one complication reported in the USG-PN group vs. three in the USPNA group. This suggests that USG-PN is a safer procedure compared to USPNA.

Overall, the study results indicate that USG-PN is an effective and safe method for the treatment of pancreatico-biliary diseases, with a higher success rate and lower incidence of complications compared to traditional percutaneous needle aspiration. Further studies are needed to confirm these findings and to evaluate the long-term outcomes of USG-PN.

Keywords: pancreatico-biliary disease, ultrasonically guided percutaneous needle aspiration, success rate, complications.