Indocyanine green (ICG) is fluorescent dye under near-infrared light and has been widely used in various fields of hepatobiliary surgery. Many hepatobiliary surgeons have used ICG fluorescence imaging for liver mapping in liver resection, intra-operative fluorescence cholangiography and hepatic tumor localization. Intraoperative ICG fluorescence imaging is a very simple, safe, and enables surgeons to acquire real-time visualization of hepatobiliary anatomy. Hence, it reduces postoperative complications such as bile duct injury. So, we describe the case of a 64-year-old male who underwent laparoscopic excision of huge hepatic cyst guided under near-infrared fluorescence imaging using indocyanine green.

There was no blood transfusion during operation. The operation time was 155 minutes. He had no postoperative complications such as biliary leakage or stricture and his postoperative CT scan showed usual postoperative findings. The final pathologic report revealed simple cyst. He was discharged on 7th postoperative day.

Conclusively, ICG fluorescence imaging is a novel technique in hepatobiliary surgery providing intraoperative real-time visualization to surgeons. This safe and convenient technique has the potential to become a standard procedure for hepatobiliary surgery.