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Utilization of 3D printing technology in hepatopancreatobiliary surgery

Key words: 3D printing, Hepatopancreatobiliary surgery, Organ model, Cancer model

Research Summary

This review focused on the status of research and application of 3D printing technology in the field of hepatopancreatobiliary surgery.

- 3D printing technology has been applied to create detailed anatomical models for disease management, medical training and patient education.
- Cancer models have been created using 3D printing technology for the research and selection of chemotherapy drugs.

Innovation points

Comprehensive table and figure were generated to summarize the seven common types of 3D printing technology and application of 3D printing technology in the hepatopancreatobiliary surgery.

Table 1 | Summary of different 3D printing technologies.

Figure 1 | 3D-printed models for hepatic tumors.

Figure 2 | 3D-printed model of intra-abdominal cavity.

Figure 3 | 3D-printed polycaprolactone biliary stents.