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THE TECHNIQUE OF INTENSITY-MODULATED RADIOTHERAPY IN THE TREATMENT OF CHOLANGIOCARCINOMA

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Aims and background: **Conventional radiotherapy in inoperable cholangiocarcinoma is limited by radiotolerance of the surrounding tissues. The aim of our dosimetric study was an evaluation of intensity-modulated radiotherapy in the treatment of inoperable bile duct carcinoma.**
Methods: **Four patients with inoperable cholangiocarcinoma treated by self-expandable stent placed to the biliary tree and radiotherapy were studied. The rotational technique, conformal 3D BOX technique and intensity-modulated radiotherapy plan were compared. Dose volume histograms and the normal tissue complication probability concept were used for comparison. The stent was used for target motion verification.**
Results: **The intensity-modulated radiotherapy plans showed favorable dose distribution in planning target volume and remarkable sparing of organs at risk.**
Conclusions: **The intensity-modulated radiotherapy technique in bile duct carcinomas deserves further research and clinical evaluation.**

Key words: bile duct carcinoma, intensity-modulated radiotherapy.

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