

Multidetector Computed Urography in the Visualization of Pathology of the Upper Urinary Tract — the Search of Optimal Protocol and Ways to Reduce Radiation Exposure (Literature Review)

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Abstract

Multidetector computed tomography urography (MDCTU) is currently the most widely accepted method for diagnosing diseases of the upper urinary tract, it is increasingly displacing traditional intravenous urography (IVU) as the method of choice. The literature review describes the main indications for CT urography and analyses the possible ways to reduce radiation exposure: the possibility of modifying conventional scanning protocol, split-bolus techniques and dual-energy CT, which allows to create virtual unenhanced datasets. The data of russian and foreign scientific sources concerning the optimum scanning protocol search are summarized, the existing problems are highlighted.

Key words: Computed Tomography Urography (CTU), Intravenous Urography (IVU), Split-Bolus, Dual-Energy CT.

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