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**THE USE OF ULTRASOUND DIAGNOSTICS OF TRAUMATIC INJURIES OF MUSCLES AND ADJACENT
SOFT TISSUES IN FORENSIC MEDICAL PRACTICE**

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Purpose of the study. Muscle injuries are a serious problem in the practice of forensic doctors. Medical imaging is critical to confirming and assessing the severity of bodily injuries and the correct forensic qualification of existing bodily injuries.

The purpose of this study was to assess the possibilities of using ultrasound examination (ultrasound) in conducting forensic

medical examinations of individuals to determine the nature and severity of bodily injuries.

Material and methods. In this work, we used an expert-class ultrasound diagnostic device (Vinn65) with a frequency range of 7–12 MHz and a screen resolution of 1680 x 1050 pixels.

Ultrasound scans were performed in B-mode, color Doppler scanning, and power Doppler, and ultrasound elastography was performed if necessary. The scanning depth was set to 20-40 mm. Axial and lateral resolutions were 0.1 and 0.2 mm, respectively. For the control comparison, the contralateral, "healthy" sides of the patient were also examined.

In total, we conducted 56 ultrasound examinations of patients with various traumatic injuries of muscles and other soft tissues within 1 to 60 days after the injury.

Results of the study. In 27 patients, hematomas were detected with localization in the subcutaneous fat and intermuscular spaces, in the process of healing of which, according to ultrasound data, a significant decrease in the size of hematomas was observed in dynamics. In 4 patients from this group, within 1 to 2 months after the injury, posttraumatic serous cysts formed at the site of the posttraumatic hematoma in the intermuscular space. The remaining 29 patients had only posttraumatic soft tissue edema.

Conclusions. 1. Ultrasound is a fast, relatively inexpensive, informative and non-invasive method for patients that allows to identify and assess the severity of muscle injuries and adjacent soft tissues. 2. The advantage of ultrasound for assessing the healing of injuries is the possibility of repeated examination in dynamics.

3. Hematomas and swelling of soft tissues in the injured areas were documented in the individuals examined by us, which made it possible to issue an appropriate forensic medical report in a reasoned manner.



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СОЦИАЛЬНОЙ ЗАЩИТЫ НАСЕЛЕНИЯ
РЕСПУБЛИКИ ТАДЖИКИСТАН**



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Душанбе

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