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FORENSIC MEDICAL DESCRIPTION OF ACCIDENTS INVOLVING FALLS FROM CAR INTERIORS AND TRUCK BEDS, LITERATURE REVIEW

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Annotation.

Accidents involving falls from car interiors and truck beds present complex scenarios that necessitate thorough forensic medical examination. Understanding the mechanisms of injury, characteristic damage, and pathomorphological features is crucial in determining the circumstances of the incident and providing an accurate legal assessment. This article delves into the essential aspects of forensic medical description of such accidents, emphasizing the importance of a detailed and methodical approach.

Keywords: accident, car interiors, pathomorphological features, methodical approach.

AVTOMOBIL ICHKI QISMI VA KORPUSIDAN YIQILIB TUSHGAN BAXTSIZ HODISALARNING SUD-TIBBIY TAVSIFI

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Annotatsiya.

Avtomobil ichki qismidan yoki yuk mashinasining to'shagidan tushish bilan bog'liq baxtsiz hodisalar sud-tibbiy ekspertizasini talab qiladigan murakkab stsenariylardir. Shikastlanish mexanizmlarini, xarakterli shikastlanishlarni va patomorfologik xususiyatlarni tushunish voqea holatlarini aniqlash va aniq huquqiy baho berish uchun juda muhimdir. Ushbu maqolada bunday baxtsiz hodisalarni sud-tibbiy tavsiflashning asosiy jihatlari ko'rib chiqiladi, batafsil va uslubiy yondashuvning ahamiyati ta'kidlanadi.

Kalit so'zlar: yo'l-transport hodisasi, avtomobil ichki qismi, patomorfologik xususiyatlar, uslubiy yondashuv.

СУДЕБНО-МЕДИЦИНСКОЕ ОПИСАНИЕ НЕСЧАСТНЫХ СЛУЧАЕВ ПРИ ПАДЕНИИ ИЗ САЛОНА АВТОМОБИЛЯ И КУЗОВА

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Аннотация.

Несчастные случаи, связанные с падениями из салона автомобиля или кузова грузовика, представляют собой сложные сценарии, требующие тщательной судебномедицинской экспертизы. Понимание механизмов травмы, характерных повреждений и патоморфологических особенностей имеет решающее значение для установления обстоятельств происшествия и дачи точной юридической оценки. В этой статье рассматриваются основные аспекты судебно-медицинского описания подобных несчастных случаев, подчеркивается важность детального и методичного подхода.

Ключевые слова: дорожно-транспортное происшествие, салон автомобиля, патоморфологические особенности, методический подход.

Mechanisms of Falls

Falls from car interiors and truck beds can occur under various circumstances, including:

- Road Traffic Accidents (RTAs): Sudden stops, collisions, rollovers, and other emergency situations can result in passengers being ejected from the vehicle's interior or truck bed.
- Careless Actions by Passengers: Opening doors while the vehicle is in motion, standing in the truck bed, or sitting on the vehicle's sides can lead to falls.
- Technical Malfunctions: Defective door locks, malfunctioning seat belts, and other retaining system failures can contribute to passengers falling out of the vehicle [1].

Forensic Medical Aspects of Injury Description

Characteristic Injuries from Falls from Car Interiors

Falls from car interiors typically result in the following types of injuries:

- Cranio-Cerebral Injuries: Common in falls from the height of car seats, including contusions, concussions, intracranial hemorrhages, and skull fractures.
- Spinal Injuries: Depending on the body's position during the fall, compression fractures of vertebrae and spinal cord injuries may occur.
- Thoracic and Abdominal Organ Injuries: Rib fractures, lacerations of internal organs (liver, spleen, kidneys) due to impact with hard surfaces.
- Extremity Injuries: Fractures of the bones of the arms and legs, dislocations, ligament, and tendon ruptures [2].

Characteristic Injuries from Falls from Truck Beds

Falls from truck beds involve a higher risk of severe injuries due to the greater height and lack of retaining systems:

- Multiple Traumas: Concurrent injury to several body parts. Combined cranio-cerebral, thoracic, and extremity injuries are possible.
- Pelvic and Lower Extremity Injuries: Fractures of the pelvic bones, femur fractures, joint injuries, and soft tissue damage.
- Deformative Injuries: Lacerated and crushed wounds associated with impacts against uneven surfaces of the truck bed and roadway [3].

Pathomorphological Changes

Cranio-Cerebral Injuries

- Macroscopic Changes: External hematomas, abrasions, lacerations on the scalp. Internal hemorrhages, subdural hematomas, brain tissue tears.
- Microscopic Changes: Diffuse axonal injury, neuronal necrosis, brain tissue edema [4].

Spinal Injuries

- Macroscopic Changes: Compression fractures of vertebrae, intervertebral disc injuries.
- Microscopic Changes: Hemorrhages in the spinal cord, degenerative changes in neurons.

Thoracic and Abdominal Organ Injuries

- Macroscopic Changes: Rib fractures, lung, liver, spleen lacerations, intra-abdominal hematomas.
- Microscopic Changes: Tissue necrosis in internal organs, parenchymal hemorrhages.

Extremity Injuries

- Macroscopic Changes: Bone fractures, soft tissue lacerations, joint dislocations.
- Microscopic Changes: Inflammatory changes, muscle necrosis, hemorrhages in joint capsules.

Methodology of Forensic Medical Examination

A comprehensive investigation is essential for an accurate forensic medical description of accidents involving falls from car interiors and truck beds:

Scene Investigation

- Documentation of the Scene: Photographing the accident site, vehicle, and position of the victim.
- Analysis of Traces: Examination of bloodstains, fabric fibers, and vehicle damage.

External Examination of the Body

- Initial Assessment of Injuries: Photographing and describing external injuries, determining the location and nature of the wounds.
- Documentation of External Injury Signs: Abrasions, lacerations, and hemorrhages.

Internal Examination

- Autopsy: Detailed dissection to identify internal injuries.
- Macroscopic Description: Recording all detected injuries, their location, and dimensions.

- Microscopic Examination: Histological study of damaged tissues to identify cellular-level changes [5].

Laboratory Investigations

Toxicological Analysis: Determining the presence of alcohol, drugs, or other substances in the victim's body.

- Biochemical Investigations: Blood and urine analysis to assess the overall condition of the body and identify any comorbidities.

Forensic Medical Interpretation

Determining the Mechanism of Injury

- Comparative Analysis of Injuries: Correlating the nature and location of injuries with the circumstances of the incident.
- Evaluating Probability of Different Scenarios: Identifying the most likely injury mechanism based on pathomorphological data and scene investigation findings.

Estimating the Age of Injuries

- Study of Healing Stages: Determining the age of injuries based on the stage of inflammatory and reparative processes.
- Use of Specialized Methods: Radiological and immunohistochemical methods for precise dating of injuries.[6]

Legal Assessment

- Forensic Medical Report: Formulating conclusions on the nature and severity of injuries and their consistency with the fall mechanism.
- Preparation of Court Materials: Detailed documentation of all findings, preparation of reports, and expert opinions for presentation in court.

Conclusion

Forensic medical description of accidents involving falls from car interiors and truck beds requires profound expertise and a multidisciplinary approach. Understanding the pathomorphological changes and employing advanced diagnostic methods allow for an accurate determination of the

incident circumstances and provide a sound basis for legal evaluation. Thorough analysis of all aspects of the incident is key to achieving a fair resolution in legal proceedings related to such accidents.

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