

Letter to Editor: Burns Due to Rupture of Car Radiator Piping System



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Citation: Ahmadabadi A. Burns Due to Rupture of Car Radiator Piping System. Iran J Burn Wound Res. 2025; 1 (1): 1-2.

 <http://dx.doi.org/10.32592/IJBWR.1.1.1>



Article info:

Received: 26 Apr 2024

Accepted: 22 Sep 2024

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To the Editor

In most car models, a part of the engine cooling system piping passes under the car dashboard, where the driver's or front passenger's legs are positioned beneath it. To protect the driver and the passengers, the pipes that pass through the car's interior are selected from high-quality materials and carefully insulated around them. In addition, a heat-resistant protective plate is placed above the driver's and front passenger's legs so that if there is a leak from the radiator piping system or the car's heater, hot water does not fall directly on the driver's and front passenger's legs. In some car models produced in Iran, especially in the Peugeot 206 car manufactured by the Iran Khodro factory, the driver or the front passenger suffers from burns due to the radiator or heater pipes rupture. A sudden splashing of hot water on the driver's legs can result in losing car control and overturning. Moreover, the accumulation of water vapor inside the car cabin may impair the driver's vision and lead to a traffic accident. Upon reviewing articles concerning burns associated with automobiles, I have noted that this specific type of burn has not been reported, with the majority of reported cases arising from the uncapping of the vehicle's radiator (1-3). In the last two years, 26 patients visited me for treatment due to injuries caused by ruptured heating pipes or car heaters. Most of them were young or middle-aged

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(36.9±11.5 years old), and 69% (18 people) were male. The mean of total body surface area burned (TBSA %) was 6.5% ± 3.6%. Most of the patients (23 patients, 88.5%) had partial or full-thickness burn injuries and underwent surgery and skin autograft. Domestic car manufacturing companies should reconsider the choice of the appropriate type of pipes for car radiators and heaters and place more reliable insulation plates under the car dashboard and above the driver's and front passenger's legs. In addition, the regulatory bodies of the Ministry of Industry, Mine, and Trade should adhere more to car safety regulations.

Ethical Considerations

Compliance with ethical guidelines

Not applicable.

Funding

None.

Conflict of Interests

None.

Acknowledgments

The author expresses gratitude to the personnel of the Department of Burns and Reconstructive Surgery at Imam Reza Hospital in Mashhad for their assistance in obtaining the necessary information.

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