

# Entangled Circuit during Transport of Patient

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## Dear Editor,

Transportation of mechanically ventilated patients is always challenging. Many guidelines and checklists are being prepared to combat any complications during the transfer of mechanically ventilated patients.<sup>1,2</sup>

We encountered a very dangerous complication during the transfer of an intubated patient.

A 52-year-old male with multiple traumas received in casualty. Due to poor breathing and Glasgow Coma Score (GCS) 6, the patient was intubated with a cuffed endotracheal tube (ETT) of internal diameter 7.0 mm. After ensuring the proper position of ETT and adequate air entry, the tube was fixed and connected to a mechanical ventilator. The patient was then to be transported to the intensive care unit (ICU) for further management. For transport of the patient to the ICU, the patient was shifted to a stretcher with rolling wheels. The ETT was connected to Bain's circuit with an oxygen cylinder and manual ventilation was done by the casualty doctor (anesthesiologist). During transport, it was noticed that the reservoir bag got deflated and the patient was unable to ventilate. Immediately circuit was detached and the patient was ventilated with an Ambu bag. In searching for the cause, it was found that the fresh gas flow circuit got entangled in the stretcher's rotatory wheel. After a lot of effort, it was not possible to remove the fresh gas flow tube from the wheels. The patient was shifted to ICU where the ventilator was kept ready and immediately the patient was connected to it. The patient was then managed according to ICU protocol.

The risk of transferring a critically ill patient is manifold. An unplanned, unorganized, and hastily done patient transfer can significantly contribute to morbidity and mortality.<sup>3</sup> Patients with the requirement of advanced respiratory care during transport must be accompanied by a competent doctor along with a nurse and a paramedic.<sup>4</sup> The transport personnel is an important factor in safe transport and should be well qualified to anticipate and manage any complications that may arise during the transport process (Fig. 1).

In our case, the entanglement of the fresh gas flow tube in the wheels of the stretcher led to a complete failure to ventilate the patient. Entanglement of the fresh gas tube in the wheels of the stretcher will cause decrease tidal volume, oxygen desaturation, and loss of ventilation. As it is a routine, in our institute to carry an Ambu bag during the transport of the patient, we were saved from a catastrophic incident. The patient was transported to ICU safely and then subsequently weaned there. From this case, we want to emphasize the importance of carrying an Ambu bag during the transport of patients. Also, special attention is to be given to hanging breathing circuits and they must be secured during the transport of patients.

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Fig. 1: Entangled circuit in the wheels of the stretcher

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