

# The Occurrence of Tension Pneumothorax under General Anesthesia : Onset during Brain Surgery

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**Abstract :** A 57-year-old man fell into an ill-ventilated state during brain surgery, after the clipping of a cerebral aneurysm. A chest X-ray after the operation revealed tension pneumothorax on the left side. An immediate deaeration with needle puncture and intrathoracic drainage was performed, followed by a bullectomy with video-assisted thoracic surgery. The onset of pneumothorax during general anesthesia is frequently reported during laparoscopic operations. The mechanism for this occurrence is speculated to be that the gas used during the laparoscopic operation may either directly or indirectly migrate to the thoracic cavity. This case experienced an onset of tension pneumothorax under general anesthesia during brain surgery. In addition, the relationship between the onset of pneumothorax and general anesthesia is unclear. Even though the onset of pneumothorax during general anesthesia remains rare, we should pay strict attention to such an occurrence because it may occasionally become a serious disease condition.

**Key words :** Pnumothorax, General anesthesia, Onset during operation