Management of a complicated pulmonary fistula caused by lung cancer using a fibrin glue-soaked polyglycolic acid sheet covered

with an intercostal muscle flap.

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Abstract:

Pulmonary fistulas caused by tumours are very fragile and difficult to suture directly. It is impossible

to close pulmonary fistulas with tissue sealants when massive air leakage occurs in the low pressure

of the respiratory tract. A 73-year-old man with a pneumothorax caused by lung cancer had suffered

a persistent massive air leakage for more than one month. We used a fibrin glue-soaked polyglycolic

acid (PGA) sheet for sealing the complicated fistula. In addition, the visceral pleura of the fistula was

wrapped with the pedicle of an intercostal muscle (ICM) flap to prevent massive air leakage. The

pneumothorax did not reappear after surgery. Thus, a fibrin glue-soaked PGA sheet covered with an

ICM flap was effective for sealing an intractable air-leaking fistula caused by lung cancer.