Gas gangrene in a liver transplant - an anecodote from Sir Roy Calne

In the mid 1990s a young nurse with acute liver failure was referred to us for a liver transplant. This was performed from a deceased donor. Ten days later during our evening ward rounds she suddenly collapsed and appeared to be in a state of severe shock with hypotension and rapid loss of consciousness. Chest X-ray showed what appeared to be "lung" under the diaphragm but in fact was gas in a gangrenous, infarcted liver secondary to thrombosis of the hepatic artery. She was resuscitated urgently but it was anticipated that the gas gangrene would cause her death within a few hours. Therefore a decision was made to remove the liver, to perform a porto-caval shunt and try and keep her alive without a liver until we could obtain a liver for her for grafting.



We contacted all our colleagues in the UK and in continental Europe and surgeons from Hanover came to the rescue, sending a liver they had just removed, intended for one of their own patients but because of the extreme urgency sent to us. This act of goodwill saved our patient who was transplanted 18 hours after removal of her liver, her survival being a tribute to the skill and extreme hard work of the anaesthetists and ICU nursing team. Unfortunately the liver was an incompatible blood group and underwent rejection within a couple of weeks but long enough for the patient to recover fully from the septic shock.

She received a third liver transplant but after some weeks it was clear that this also undergoing chronic rejection and she requested yet another liver transplant which with some trepidation we agreed to do and following the fourth graft she recovered well.

The patient is still alive with good liver function more than 30 years after operation, a tribute to her courage but also the generosity of colleagues and the relatives of donors. The question of whether one patient should have more than one liver has been much debated in recent years but at the time in question described here the results of liver transplantation were so uncertain that these ethical matters were not considered.