Animal No. 1: (Animals are numbered in chronological order.) ~~It was the first percutaneous transhepatic portal vein catheterization we had ever done, with known methodologies.~~ Difficulty was encountered~~It was hard to~~ in trying to distinguish the intrahepatic versus the extrahepatic segments of the portal vein~~ sections inside and outside the liver~~ in the Rhesus monkey ~~only by using only~~by intra-operative visualization alone of the liver~~ the liver anatomy of liver in of the Rhesus monkey~~. Because the ~~technologists~~ technicians were unfamiliar with the hepatobiliary anatomy~~livers~~ of the Rhesus monkey~~s~~, we mistakenly punctured the right branch of the portal vein, the entirety of which is extrahepatic in the Rhesus monkey~~ (the entire right branch of Rhesus monkey's portal vein is outside the liver),~~. ~~to cause~~ This caused ~~the~~ bleeding at the puncture site, which was extrahepatic~~outside the liver~~ and at risk for persistent bleeding due to lack of the natural tamponade effect with intrahepatic portal vein puncture. The monkey died of blood loss and shock ~~in~~ 10 hours after ~~the~~ surgery. Due to the slow ~~speed pace~~rate of bleeding, it was hard to monitor the for post-procedural bleeding~~procedure by the~~ using ~~ultraso~~ultrasound~~nic exam technology~~ alone, even when ultrasound was performed immediately after the surgery.

Animal No. 2: ~~Because Rhesus monkeys has take deep breaths and the their~~ The diaphragms of Rhesus monkeys~~is~~ are lower than that in ~~than~~ humans~~'~~. In this animal, we failed to follow the respiratory rhythm and inadvertently~~mistakenly~~ inserted the needle when the diaphragm was not at its highest ~~reached the its lowest place~~point as it would be during maximal expiration. The thoracic cavity of the monkey was injured, ~~and~~ caus~~ed~~ing pneumothorax. No specific therapeutic measure was taken for the pneumothorax and the monkey healed by itself.~~–~~

We used the ~~ith the~~ lessons from the first two operations~~, our skill improved gradually~~ to improve our technique. ~~, o~~Total operation time was shortened greatly and ~~no complications occurred~~the subsequent three monkeys experienced no complications. ~~The rest three was performed successfully without any complications.~~

Changes ~~of~~ in p~~P~~ortal v~~V~~enous p~~P~~ressures at different times during~~of~~

Comment [BW1]: This statement appears to lack a scientific basis and should be deleted, unless you can cite a reference. There's no obvious reason why a Rhesus monkey should take any deeper breaths than humans unless it is mechanically overventilated during general anesthesia.

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