



A rare complication of umbilical venous catheter (UVC) insertion is the extravasation of the infusate into the peritoneal cavity” Hargitai et al (2019).

Abstract:

A rare complication of umbilical venous catheter (UVC) insertion is the extravasation of the infusate into the peritoneal cavity. We report 3 cases of abdominal extravasation of parenteral nutrition (PN) fluid via UVCs. Two of these cases presented as “acute abdomen” which were assumed to be necrotizing enterocolitis clinically; however, during postmortem, PN ascites and liver necrosis were found. A further case is described in an infant with congenital diaphragmatic hernia. While we were unable to ascertain direct vessel perforation by the catheter in any of these cases, based on pathological and histological examination, the proposed mechanism of PN fluid extravasation is leakage through microinjuries of liver vessel walls and necrotic parenchyma. PN extravasation should be considered as a differential diagnosis of acute abdomen when PN is infused via an UVC presumably as PN may have a direct irritant effect on the peritoneum.

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Reference:

Hargitai, B., Toldi, G., Marton, T., Ramalingam, V., Ewer, A.K. and Bedford Russell, A.R. (2019) Pathophysiological Mechanism of Extravasation via Umbilical Venous Catheters. Pediatric and Developmental Pathology. January 25th. .

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