CO₂ in liver interventions

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CO₂ is a sufficient contrast medium, particularly in patients who are hypersensitive to iodinated contrast material or whose renal function was compromised. Now, with the availability of high-resolution DSA and a reliable gas delivery system as the Angiodroid®, CO₂ angiography has become widely used for vascular imaging and endovascular procedures.

A 74 year old patient with serious cirrhotic liver disease and renal impairment was referred to TIPSS due to heavy repetitive varicel bleeding. After transjugular puncture of the liver and creation of the tract to the portal system we performed a portal venous angiogram with CO₂ to confirm intravascular position and perform pressure gradient measurement. After tract dilatation and positioning of a 8mm Viator-Stent® (Gore) a additional control angiogram confirmed the patency of the TIPSS. The complete intervention was performed with CO₂.