

## Study Protocol

# *syngo* DynaCT 360 with IV injection used for TIPS planning

Interventional Oncology

A non-invasive contrast-enhanced (intravenous injection) *syngo* DynaCT was deemed as the best choice due to the lack of previous conventional CT.

---

### Courtesy of

Ulf Teichgräber, MD,  
Renè Aschenbach, MD,  
Department of Diagnostic  
and Interventional Radiology,  
Jena University Hospital,  
Germany

### Supported by

*syngo* DynaCT 360

### System & Software

Artis zeego with  
Q technology VD10  
*syngo* X Workplace VC10

---

## Case Description

### Patient history

48-year-old female patient;  
liver cirrhosis.

### Diagnosis

Ascites and portal hypertension with  
esophageal varices and bleeding.

### Treatment

### TIPS procedure.

Due to a missing preprocedural  
contrast enhanced CT study, a  
*syngo* DynaCT 360 with intravenous  
contrast injection was performed to  
evaluate patency of portal vein.

Visualization of right portal vein to  
plan intervention.

### General comments

Portal vein patency is crucial for TIPS  
procedure. Therefore a non-invasive  
contrast-enhanced (intravenous  
injection) *syngo* DynaCT was  
deemed as the best choice due to  
the lack of previous conventional CT.

### Tips and tricks

*syngo* DynaCT 360 offers more  
coverage compared to conventional  
cone-beam CT to evaluate portal  
vein, hepatic vein and other vascular  
structures in the abdomen.

## **syngo DynaCT with IV injection used for TIPS planning**

Acquisition protocol	6s Large Volume 360°
----------------------	----------------------

### **Injection protocol**

Catheter position	Antecubital vein
Contrast medium (CM)	370 mg iodine/mL
Dilution (CM/Saline):	No
Injection volume	80 mL
Injection rate	3 mL/s
Duration of injection	26.6 s
X-ray delay	40 s
Power injector used	Yes

### **Reconstructions**

#### **Primary**

Name	DynaCT Body Nat Fill HU
VOI size	Full
Slice matrix	512 × 512
Kernel type	HU
Image characteristics	Normal
Reconstruction mode	Nat Fill
Viewing preset	DynaCT Body

## Clinical Images

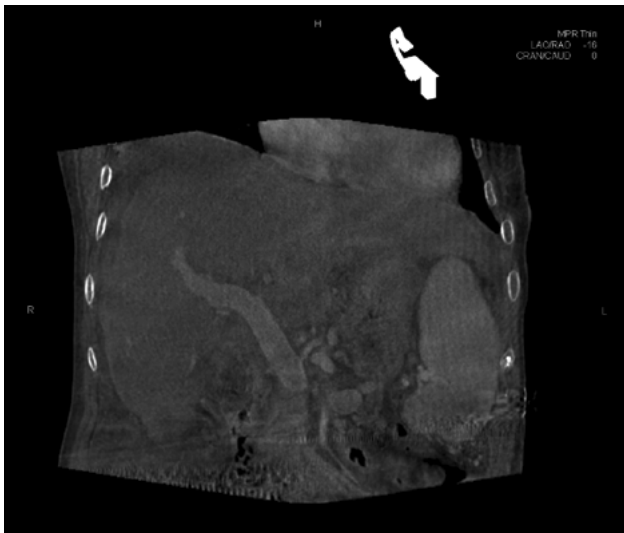


Figure 1: MPR thin coronal portal vein<sup>1</sup>

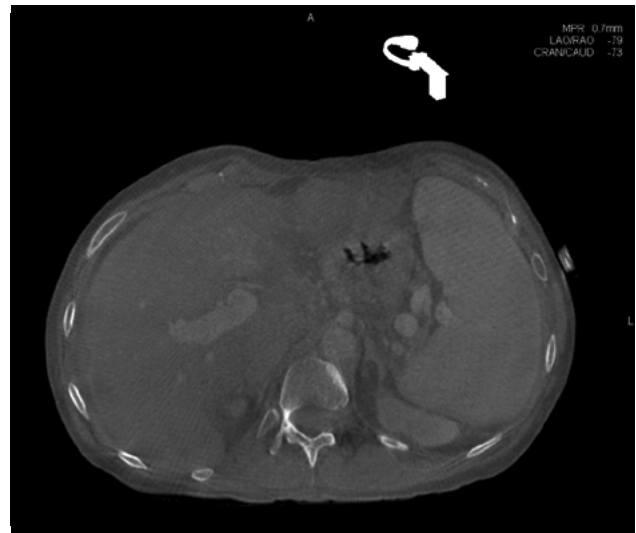


Figure 2: MPR thin axial right portal vein<sup>1</sup>

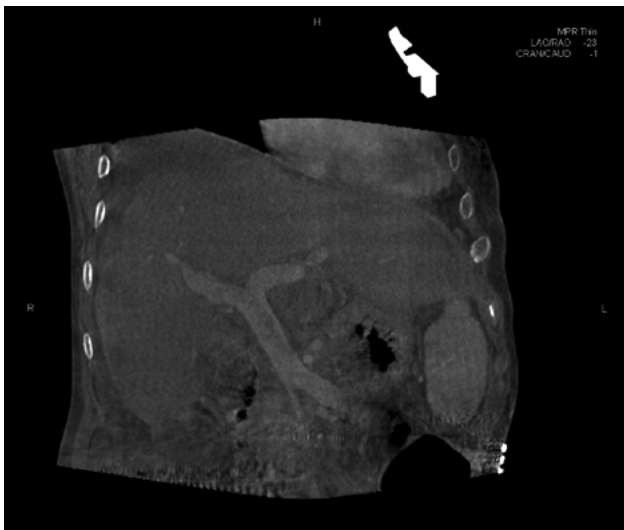


Figure 3: MPR thin coronal portal vein<sup>1</sup>

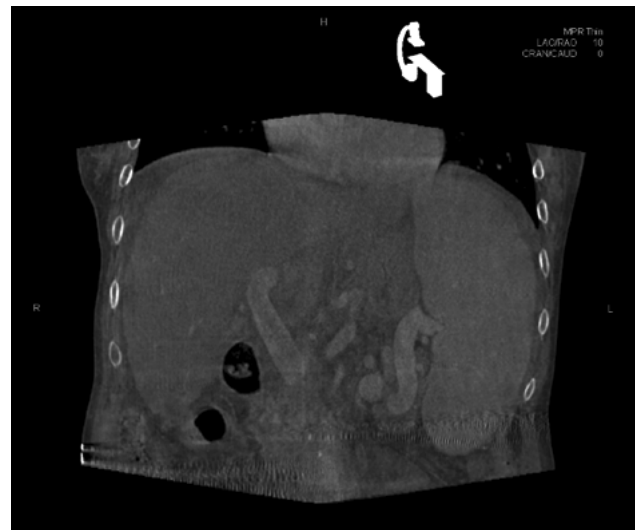


Figure 4: MPR thin coronal splenic vein and collaterals<sup>1</sup>

---

### Siemens Healthineers Headquarters

Siemens Healthcare GmbH  
Henkestr. 127  
91052 Erlangen, Germany  
Phone: +49 9131 84-0  
siemens-healthineers.com

<sup>1</sup> Artifacts visible due to ruler taped to patient skin.

The statements by Siemens' customers presented here are based on results that were achieved in the customer's unique setting. Since there is no "typical" hospital and many variables exist (e.g., hospital size, case mix, level of IT adoption), there can be no guarantee that other customers will achieve the same results.

On account of certain regional limitations of sales rights and service availability, we cannot guarantee that all products included in this case are available throughout the Siemens sales organization worldwide.

All rights reserved.