

BLOODPOOLAGENTS

CLINICAL EXAMPLES

**Pelvic Congestion Syndrome
with Reflux in the Left Ovarian Vein**

Pelvic Congestion Syndrome with Reflux in the Left Ovarian Vein

Clinical details

Unexplained pelvic disorders. The pelvic CT findings were incorrectly diagnosed as an angioma.

MR Equipment		
Type	Philips Intera	
Field Strength (T)	1.5	
Gradient Amplitude (mT/m)	66	
Gradient Rise Time (ms)	0.16	
Coil(s)	Synergy Body	
MR Sequence Parameters	Dynamic	Steady State
Sequence	T1 3D FFE	THRIVE T1 FFE
Repetition Time (ms)	4.1	3.0
Echo Time (ms)	1.2	1.1
Flip Angle (°)	12	35
Slice Thickness (mm)		
M: measured	M: 5	M: 3
R: reconstructed	R: 2.5	R: 1.5
Number of Slices	70	85
FOV (mm)	430	425
Phase Field of View (%)	80	100
Acquisition Matrix (Pixel)	233	274
Resolution (mm ²)		
M: measured	M: 1.84 X 1.47	M: 1.55 x 1.55
R: reconstructed	R: 1.34 x 1.34	R: 0.83 X 0.83
Image Matrix (Pixel)	320	512
Acquisition Time (s)	17	54
Fat Saturation (yes/no)	no	yes
Parallel Imaging (Factor)	2	2
Contrast Agent Application (all i.v.)	Dynamic	Steady State
Test Bolus Contrast Media	Gadofosveset	
Application Type	automated	
Volume @ Flow Rate	1 ml @ 2 ml/s	
Testbolus NaCl		
Application Type	automated	
Volume @ Flow Rate	20 ml @ 2 ml/s	
MR Angiography		
Application Type	automated	
Volume @ Flow Rate	9 ml @ 2 ml/s	
Time of Delay Injection to Sequence Start (s)	16	
NaCl		
Application Type	automated	
Volume @ Flow Rate	35 ml @ 2 ml/s	

With kind permission of
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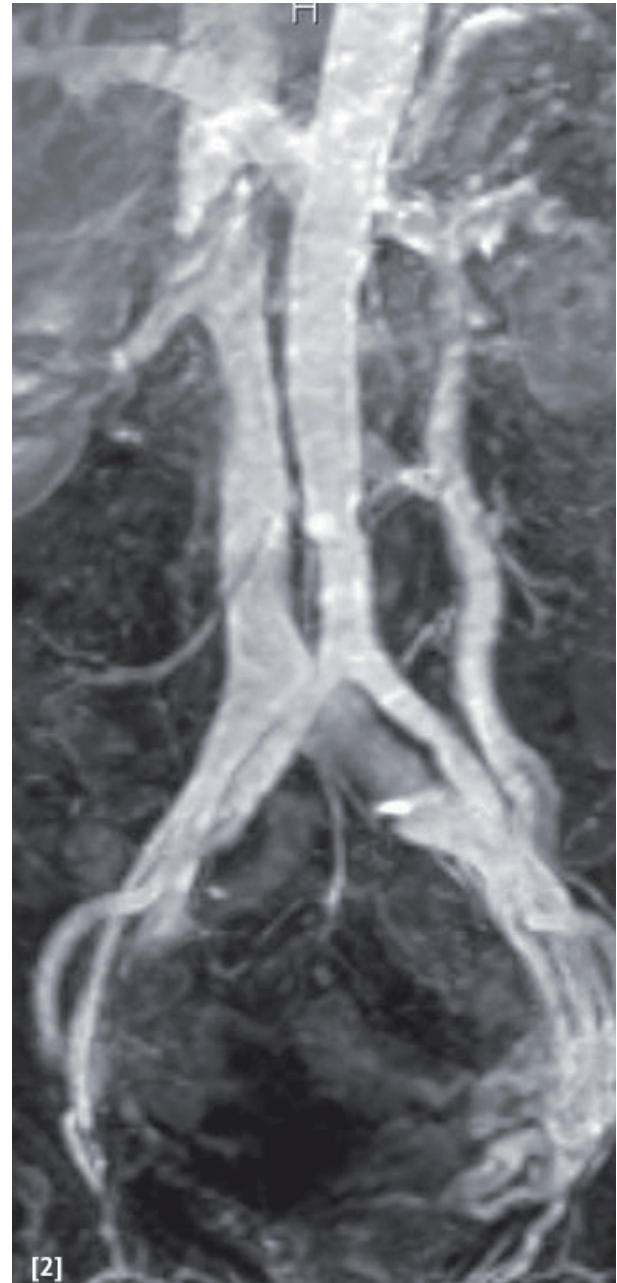
Summary of findings

Aplasia of the infrarenal vena cava. Differential diagnosis: old thrombotic plug. Reflux into the left ovarian vein is not uncommon and normally clinically asymptomatic.

Caused by the 'nutcracker phenomenon' with compression of the left renal vein between the dorsal aorta and ventral upper mesenteric vein.

Diagnosis

Compression of the left renal vein.



[1 - 2] Steady-state after Gadofosveset i.v.. Reflux of contrast blood from the left renal vein into the left ovarian vein causing reversed flow and secondary enlargement (arrow = direction of flow).