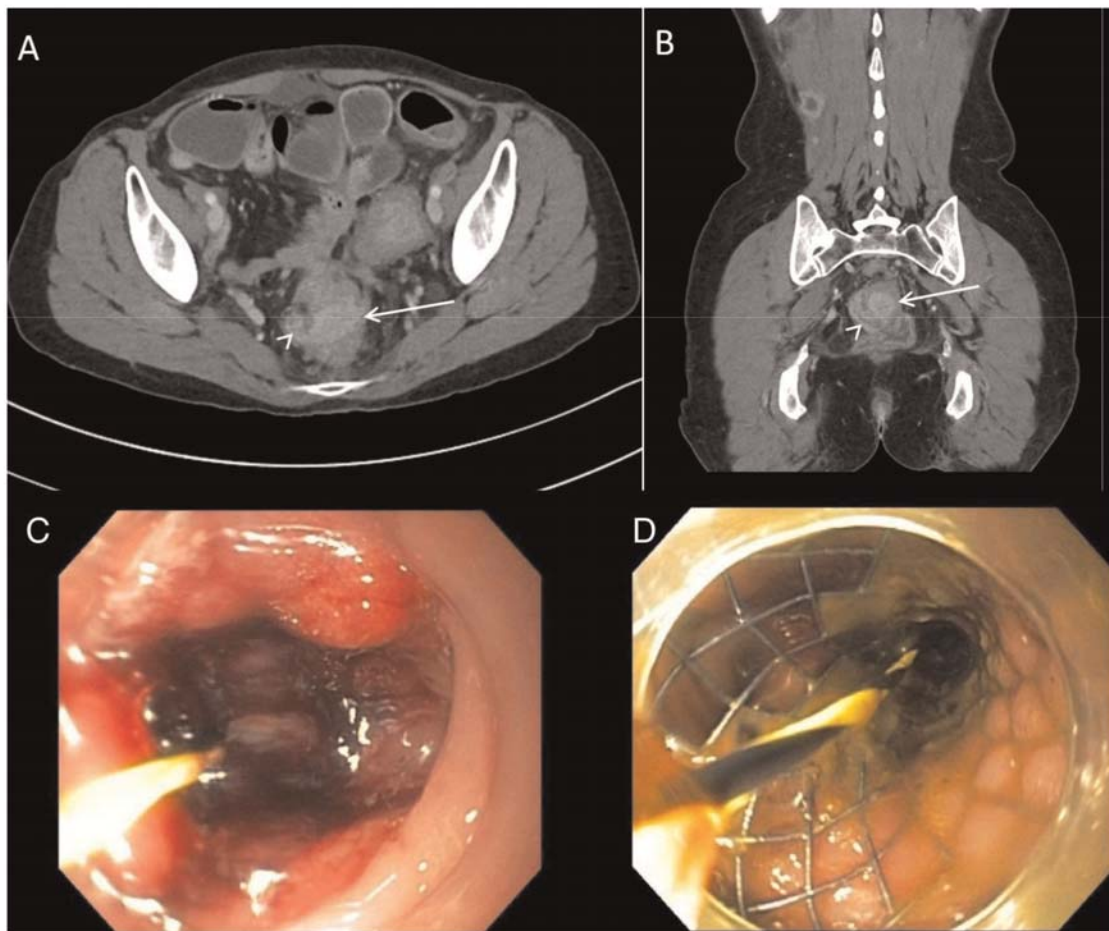


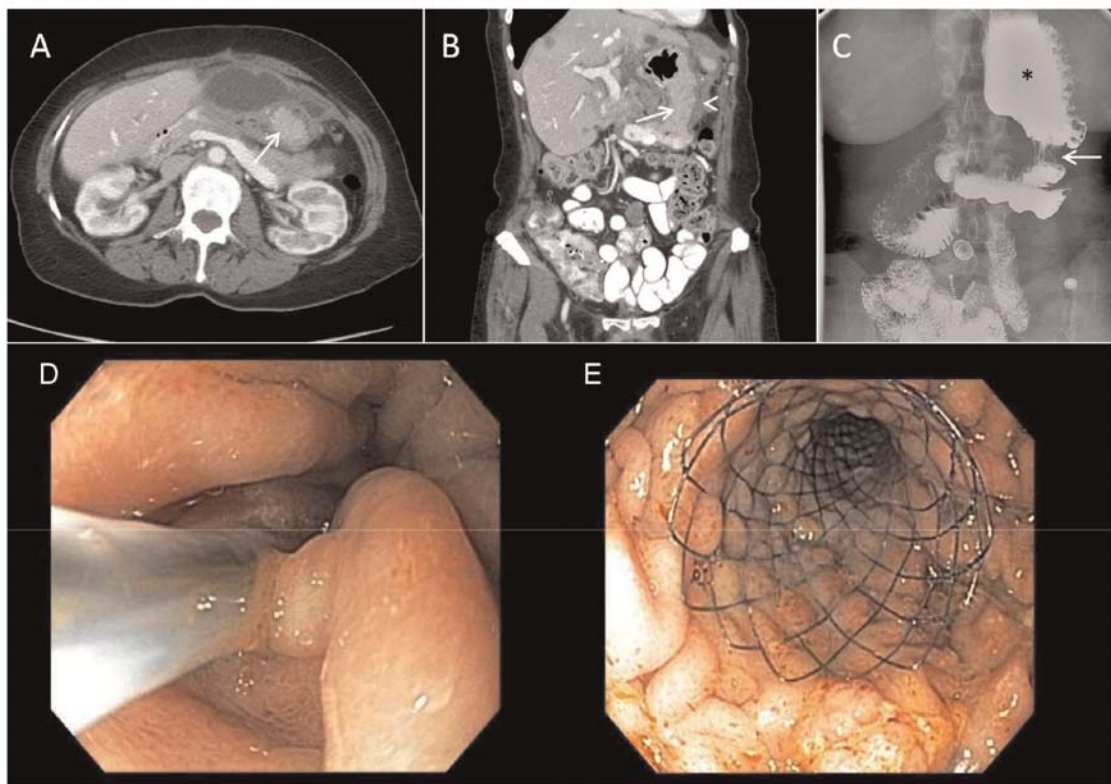
## Supplementary material

**Supplementary Fig. 1** **a** Axial and coronal **b** contrast-enhanced computed tomography images demonstrating malignant soft tissue mass (arrows) causing extrinsic compression of the rectosigmoid junction (arrowhead). **c** Endoscopic images demonstrating malignant stenosis in the rectosigmoid colon with near complete obstruction and **d** after stent placement in a patient with appendiceal cancer.



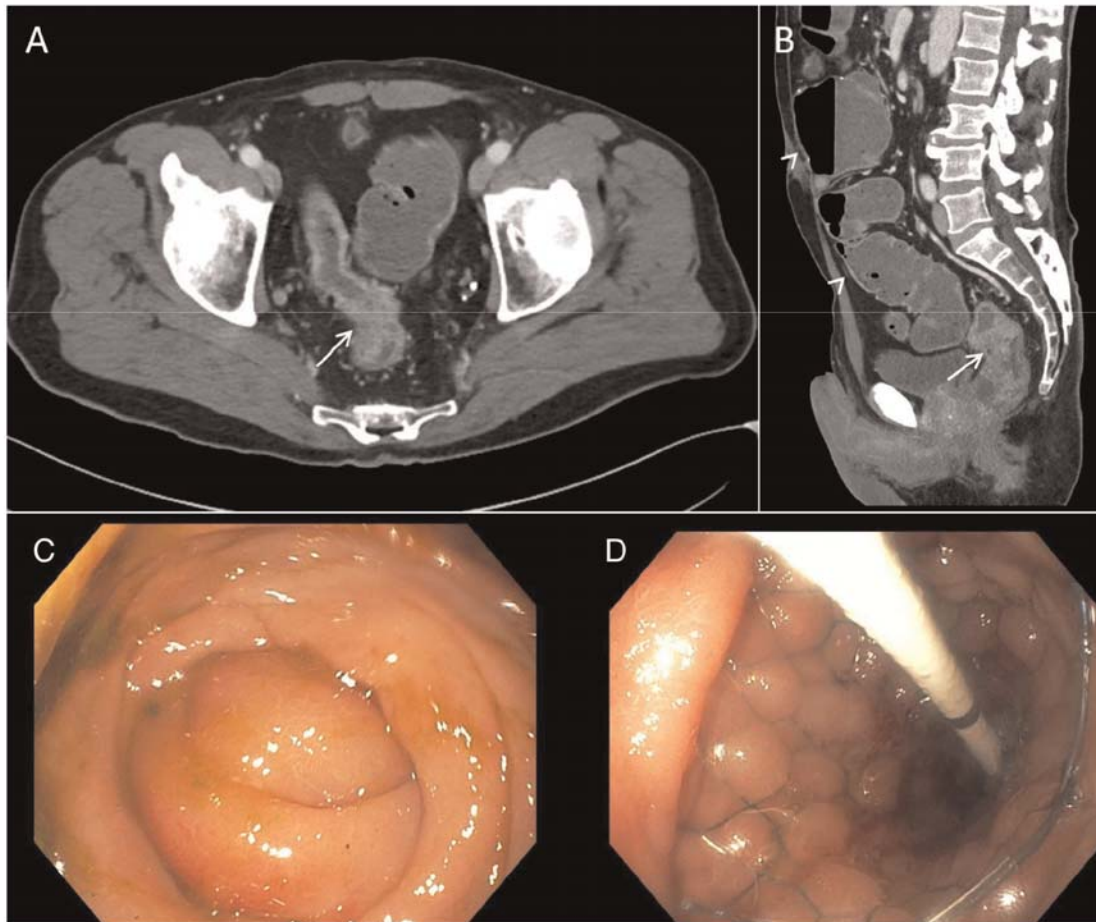
## Supplementary material

**Supplementary Fig. 2** **a** Axial and **b** coronal contrast-enhanced computed tomography, and **c** fluoroscopic upper gastrointestinal series images demonstrating luminal narrowing of the body of the stomach (arrows). There is subtle peritoneal soft tissue nodularity (arrowhead) causing malignant stenosis with associated dilation of the proximal stomach (asterisk). **d** Endoscopic images demonstrating gastric body extrinsic stenosis and **e** after stent placement in a patient with fallopian tube cancer.



## Supplementary material

**Supplementary Fig. 3** **a** Axial and **b** sagittal contrast-enhanced computed tomography images demonstrating enhancing extrinsic soft tissue mass causing marked stenosis of the rectosigmoid junction (arrows). There is associated dilation of proximal colon containing air fluid levels (arrowheads). **c** Endoscopic images demonstrating severe malignant rectosigmoid stricture and **d** after stent placement in a patient with ovarian cancer.



## Supplementary material

**Supplementary Table 1** Subgroup analysis stratified by the site of obstruction for early clinical success after single intervention.

	Clinical success in the stent group	Clinical success in the surgery group	P-value
Gastric outlet obstruction [n (%)]	9/9 (100.0)	0/0	-
Small bowel [n (%)]	0/2 (0.0)	12/13 (92.3)	0.002
Right colon [n (%)]	6/10 (60.0)	5/5 (100.0)	0.10
Left colon [n (%)]	18/30 (60.0)	13/14 (92.9)	0.026
Multiple sites [n (%)]	0/2 (0.0)	7/7 (100.0)	0.003
Anastomosis [n (%)]	3/4 (75.0)	1/1 (100.0)	0.58



## Supplementary material

**Supplementary Table 2** Baseline characteristics of patients with stent success or stent failure.

Characteristics	Stent failure (n=21)	Stent success (n=36)	P-value
Female [n (%)]	15 (71.4)	24 (66.7)	0.47
Age [years, mean $\pm$ SD]	62.2 $\pm$ 15.3	59.3 $\pm$ 12.7	0.46
Race [caucasian, mean $\pm$ SD]	19 (90.0)	35 (97.2)	0.36
BMI (kg/m <sup>2</sup> )	24.8 $\pm$ 6.3	24.7 $\pm$ 5.8	0.93
Ascites [n (%)]	17 (81.0)	28 (77.8)	0.53
ECOG			0.38
0-1	8 (38.1)	18 (50.0)	
2-4	13 (61.9)	18 (50.0)	
Histologic grade [high grade, n (%)]	17 (81.0)	31 (86.1)	0.61
Severity of PC [n (%)]			0.29
Mild	13 (61.9)	27 (75.0)	
Moderate	4 (19.0)	5 (13.9)	
Severe	4 (19.0)	4 (11.1)	
Chemotherapy [n (%)]	11 (52.4)	26 (72.2)	0.13
Radiotherapy [n (%)]	2 (9.5)	6 (16.7)	0.37
Type of cancer			0.95
Urogynecological	6 (28.6)	10 (27.8)	
Other cancer	15 (71.4)	26 (72.2)	
Diagnosis of PC [n (%)]			0.24
Imaging	12 (57.1)	26 (72.2)	
Cytology/histology	9 (42.9)	10 (27.8)	
Single or multiple sites of obstruction [multiple, n (%)]	2 (9.5)	0	0.13
Site of obstruction			0.028
Gastric outlet obstruction	0	9 (25)	
Small bowel	2 (9.5)	0	
Colon (not rectosigmoid)	5 (23.8)	8 (22)	
Rectosigmoid colon	11 (52.4)	16 (44.4)	
Multiple sites	2 (9.5)	0	
Anastomosis	1 (4.8)	3 (8.3)	
Degree of obstruction [complete obstruction, n (%)]	7 (33.3)	10 (27.8)	0.66
Obstruction length (cm)	7.7 $\pm$ 7.5	4.9 $\pm$ 2.8	0.23
Intrinsic or extrinsic obstruction [intrinsic, n (%)]	9 (42.9)	16 (45.7)	0.84
No. of stents (1/2/3)	13/2/6 (61.9/9.5/28.6)	32/4/0 (88.9/11.1/0)	0.003
Length of obstruction (cm)			

**Abbreviations:** BMI: body mass index; ECOG: Eastern Cooperative Oncology Group; PC: peritoneal carcinomatosis