Dealing with emergencies in very complex cases: why I always have enough covered stents on stock

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I have the following potential conflicts of interest to report:

- [ ] Consulting
- [ ] Employment in industry
- [ ] Stockholder of a healthcare company
- [ ] Owner of a healthcare company
- [ ] Other(s)

- [x] I do not have any potential conflict of interest
ENDOVASCULAR EMERGENCIES

- Life-threatening conditions
- Wide range of etiologies
- Target vessels of various sizes
- Unpredictable timing of appearance
- Short time for planning the best treatment
- Always consider to change your plan
COVERED STENTS IN EMERGENCIES

- Minimally invasive and effective alternative to surgery
- The only treatment option in patients who cannot undergo embolization or have a high risk for surgery
- Immediate exclusion of the lesion
- Simplify procedure otherwise cumbersome and more time consuming
COVERED STENTS ON THE MARKET

Self-Expandable

- Boston Scientific Wallgraft
- Bard Fluency Plus® Flair
- Bard COVERA®
- Gore Viabahn®

Balloon-Expandable

- Atrium Maquet Getinge Icast Covered Stent
- Bentley BeGraft ® and BeGraft Plus®
- Gore Viabahn® VBX
- Bard LifeStream®

+ iliac limb extensions
COVERED STENTS: WHAT TO USE IN ILIAC EMERGENCIES?

NO GUIDELINES!

IMPORTANT ASPECTS TO EVALUATE:

- Lesion site
- Proximal and distal neck diameter
- Vessel length to cover
- Vessel path allowing for catheter navigation
- Costs (when possible)
- *What we have on the shelves*
ILIO-ENTERIC FISTULA DUE TO A COLON CANCER METASTASIS

LEFT FEMORAL ARTERY ACCESS

- Radifocus® Introducer Sheath 7-F, 11 cm, Terumo
- Radifocus® Guidewire M Standard Type, Terumo
- BeGraft Peripheral, Bentley, 10-mm x 37-mm/75 cm
AORTO-ILIAC ANEURYSM RUPTURE IN PREVIOUS EVAR

AAA: 92X88 mm
IA: 75X57X47 mm
LEFT FEMORAL ARTERY ACCESS
- 12-F sheath Dryseal Flex Introducer Sheath (Gore)
- Gore Excluder PLC 16x12x120 mm

RIGHT FEMORAL ACCESS
- Radifocus® Introducer Sheath 5-F, 11 cm, Terumo
LEFT NATIVE ILIAC BIFORCATION PSEUDOANEURYSM AFTER AORTO-ILIAC BYPASS

PROCEDURE PLAN: «banana stenting»

- LEFT CFA ACCESS 11F/12F
- Viabahn, Gore, 10x100mm Device touch-up with a 10 mm balloon
- LEFT CFA 7F, 45 cm sheath Flexor® ANL0 Guiding Sheath, Cook Medical
- Radifocus® Guidewire M Standard Type, Terumo 9 x 37 mm 10 x 37 mm
SPONTANEOUS AORTIC RUPTURE

MORE THAN ONE OPTION
- Two femoral accesses, minimum size 14F and 12 F
- Longer procedure
  (i.e. for cannulation of contralateral gate, iliac cuffs deployment, etc)
- Longer fluoroscopy time
- Medium contrast
- Higher cost
BILATERAL FEMORAL ARTERY ACCESES

- Left: 9-F sheath, 45 cm Flexor® Ansel Guiding Sheath (Cook Medical)
- Right: 5-F sheath, 6-F, 11 cm sheath Radifocus® Introducer II, Terumo
- 12x58 mm BeGraft Aortic (Bentley) post-dilated at 16 mm
ILIAC PSEUDOANEURYSM AFTER RENAL GRAFT EXPLANTATION
BILATERAL FEMORAL ARTERY ACCESSES

- Right: 12-F sheath Dryseal Flex Introducer Sheath (Gore)
- Left: 7-F sheath, 45 cm Flexor® Ansel Guiding Sheath (Cook Medical)
- 14X29 mm BeGraft Aortic (Bentley)
- 16X19 mm BeGraft Peripheral (Bentley)
DISTAL ABDOMINAL AORTA/RIGHT CIA PSEUDOANEURYSM

(diameter 45 mm)
in a pt. with blood cell cancer

SURGERY MAYBE NOT THE BEST OPTION
BILATERAL FEMORAL ARTERY ACCESSSES

- Right: 12-F sheath Dryseal Flex Introducer Sheath (Gore)
- Left: 7-F sheath, 45 cm Flexor® Ansel Guiding Sheath (Cook Medical)

- 12x39 mm BeGraft Aortic (Bentley) – in aorta –
- 2x 6x28 mm BeGraft Peripheral (Bentley)
- 2x 10x57 mm BeGraft Peripheral (Bentley)
- 14x39 mm BeGraft Aortic (Bentley) – as right limb extension –
Endovascular treatment with covered stents is minimally invasive, safe and effective in the management of emergencies in very complex cases.

No guidelines are available regarding the choice of the best stentgraft.

The proper sizing of the stentgraft is essential to achieve technical and clinical success without complications/recurrences, therefore a wide range of stentgrafts is mandatory.
That’s why I always have enough covered stents on stock!
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