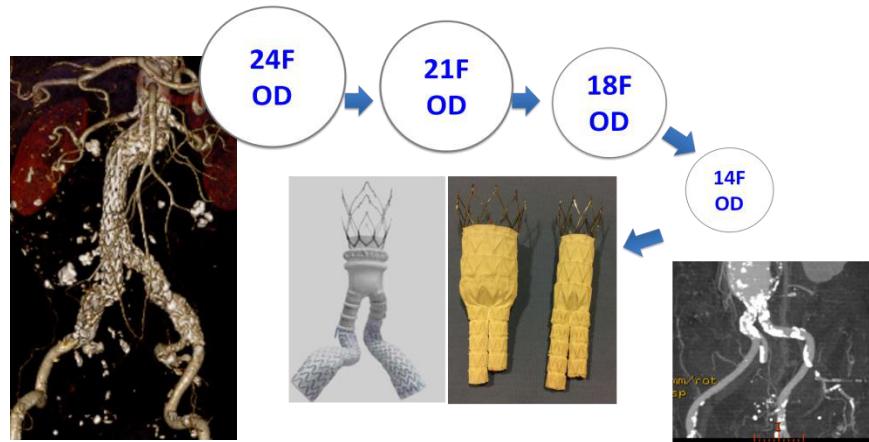


PRELIMINARY RESULTS IN THE TREATMENT OF ABDOMINAL AORTIC ANEURYSMS USING LOW-PROFILE ENDOGRAFTS

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BACKGROUND



AIM: To report a preliminary experience using the ultra-low profile (ULP) endografts (14F).

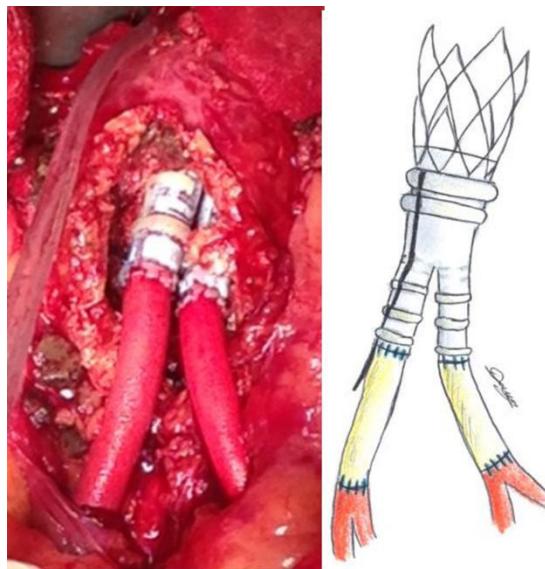
MATERIALS AND METHODS: Thirty-day results and preoperative computed tomography angiography (CTA) of all consecutive patients who underwent elective endovascular aortic repair (EVAR) with either Ovation (group A) or Incraft (group B) endografts from January 2011 to September 2015 were retrospectively analyzed. P <.05 was considered significant.

	Trivascular Ovation	Cordis Incraft
Proximal aortic neck diameter	16-30 mm	17-31 mm
Proximal aortic neck length	≥7 mm if angle <45° ≥10 mm if 45<angle<60°	≥10 mm
Aortic bifurcation diameter	n.r.	≥18 mm
Iliac-femoral access diameter	≥4.7 mm	≥4.7 mm
Iliac landing zone length	≥10 mm	≥15 mm
Iliac landing zone diameter	8-20 mm	7-22 mm
% of circumferential calcification/thrombus in the suprarenal aorta, proximal aortic neck and iliac landing zones	≤50%	≤50%
Suprarenal/Infrarenal neck angulation	<60°	<60°
Length from the lowest renal artery to the distal landing zone	≥130 mm	≥128 mm

	Ovation (n=28)	Incraft (n=21)	P
Median age (IQR)	74 (69–79)	76 (66-83)	.71
Male sex	24 (85.7%)	20 (95.2%)	.83
Median AAA diameter (IQR)	54 (52 – 55)	50 (50 – 53)	.48

Mortality	0%	0%	-
Major Adverse Events	0%	0%	-
Procedural success	26/28 (92.8%)*	20/21 (95.2%)**	.41

*One immediate open conversion for persistent occlusion of both iliac limbs and one conical endograft with fem-fem right-to-left bypass for a challenging cannulation of the contralateral gate. **One proximal aortic cuff for intraoperative type Ia endoleak



Anatomic features: proximal aortic neck

	Ovation (n=28)	Incraft (n=21)	P
Thrombus Thickness (mm)	7.2±0.5	3.4±0.7	.04
% of circumference covered by thrombus	85.2%±5.1%	25.4%±7.3%	.0004
Angulation (coronal axis)	16.7°±2.5°	36.8°±4.5°	.01
Angulation (sagittal axis)	52.6°±21.1°	48.2°±34.9°	.2
Diameter AP (mm)	31.5±1	27.6±1.7	.08
Diameter LL (mm)	29.6±0.8	25.4±1.4	.3
Neck Length (mm)	26.4±4.3	16.4±7.2	.3

CONCLUSION: Both ULP endografts showed safe and effective results. The Ovation endograft was primarily used in patients in which proximal aortic neck was affected by a greater thrombotic apposition, while the Cordis endograft was preferably used in case of more angulated proximal neck in the coronal axis.