

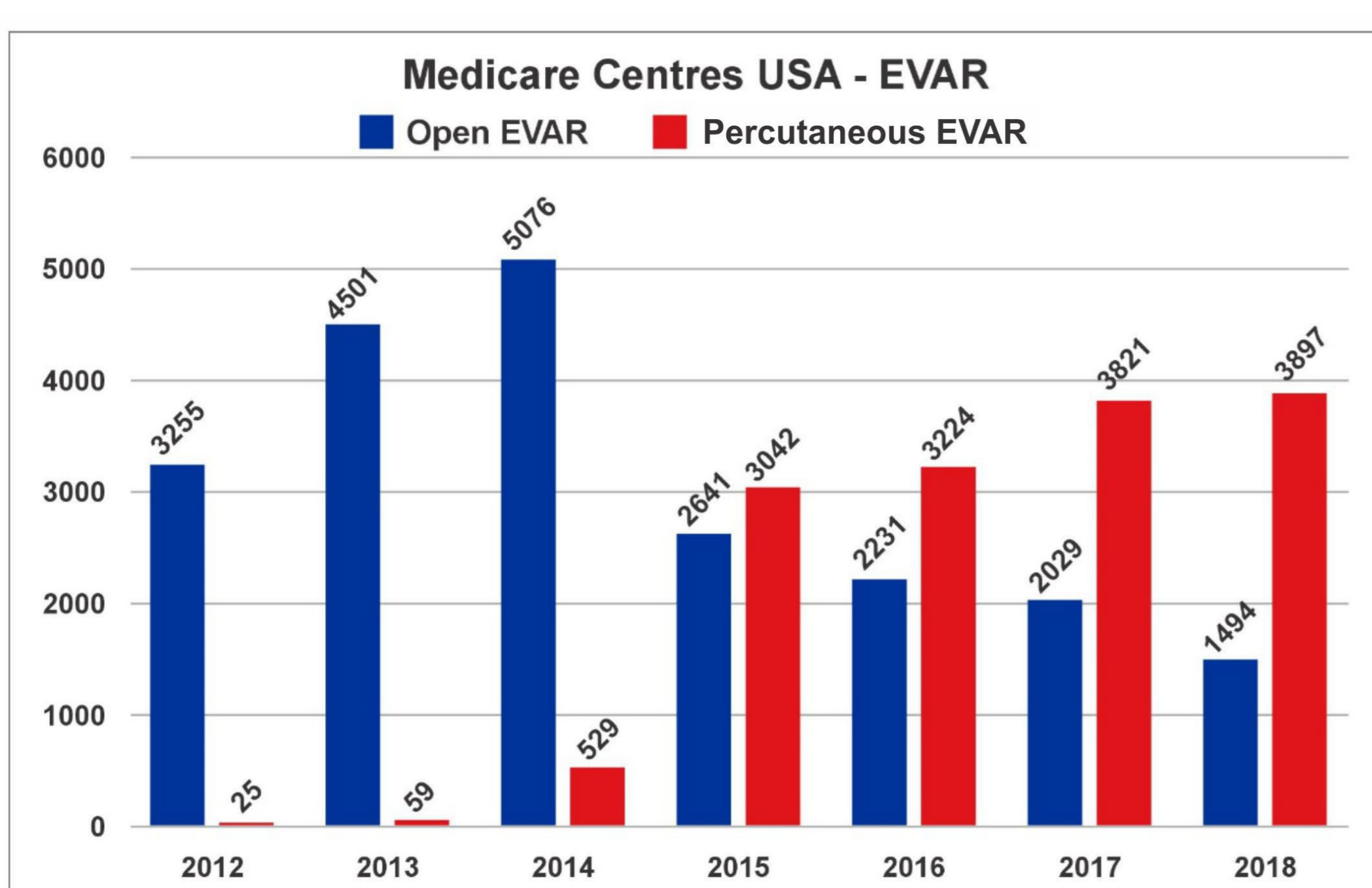
## Use of Manta device for a closure of a large-bore puncture of femoral artery for insertion of aortic stent grafts. A preliminary single surgeon experience.

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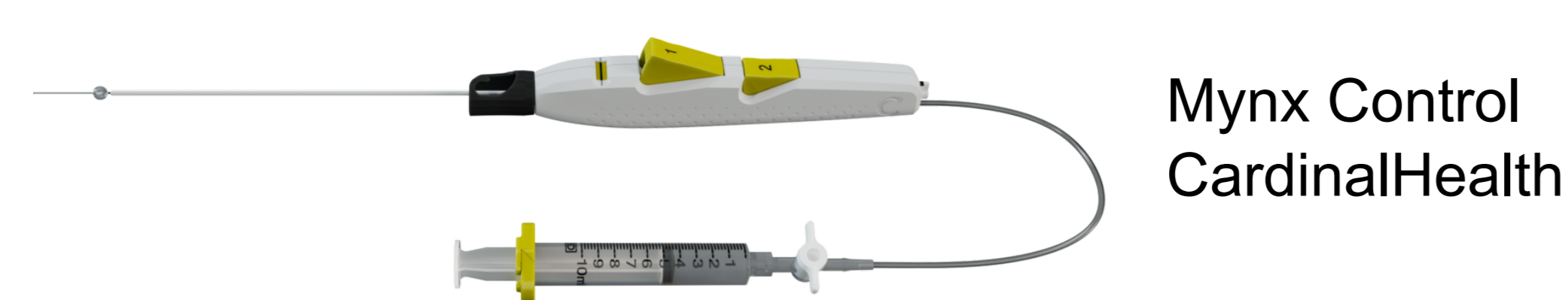
### INTRODUCTION

- percutaneous large bore access for endovascular aortic procedures is less invasive and carries fewer complications and provides earlier ambulation of the patients
- percutaneous access currently becomes a routine surgical approach for endovascular operations



A. Tanius at al, JVS, 2020

- in South Africa there are 5 commercially available closure devices for a CFA puncture closures



- two devices Perclose (Abbott) and Manta (Teleflex) are dedicated to close a large bore puncture sites



- Manta closure device deploys a bovine collagen-based plug. It is available in sizes 14 Fr & 18 Fr for insertion of sheaths between 12 Fr to 25 Fr necessary for placement of stent grafts used for EVAR, TEVAR & isolated aortic interventions

### METHODS



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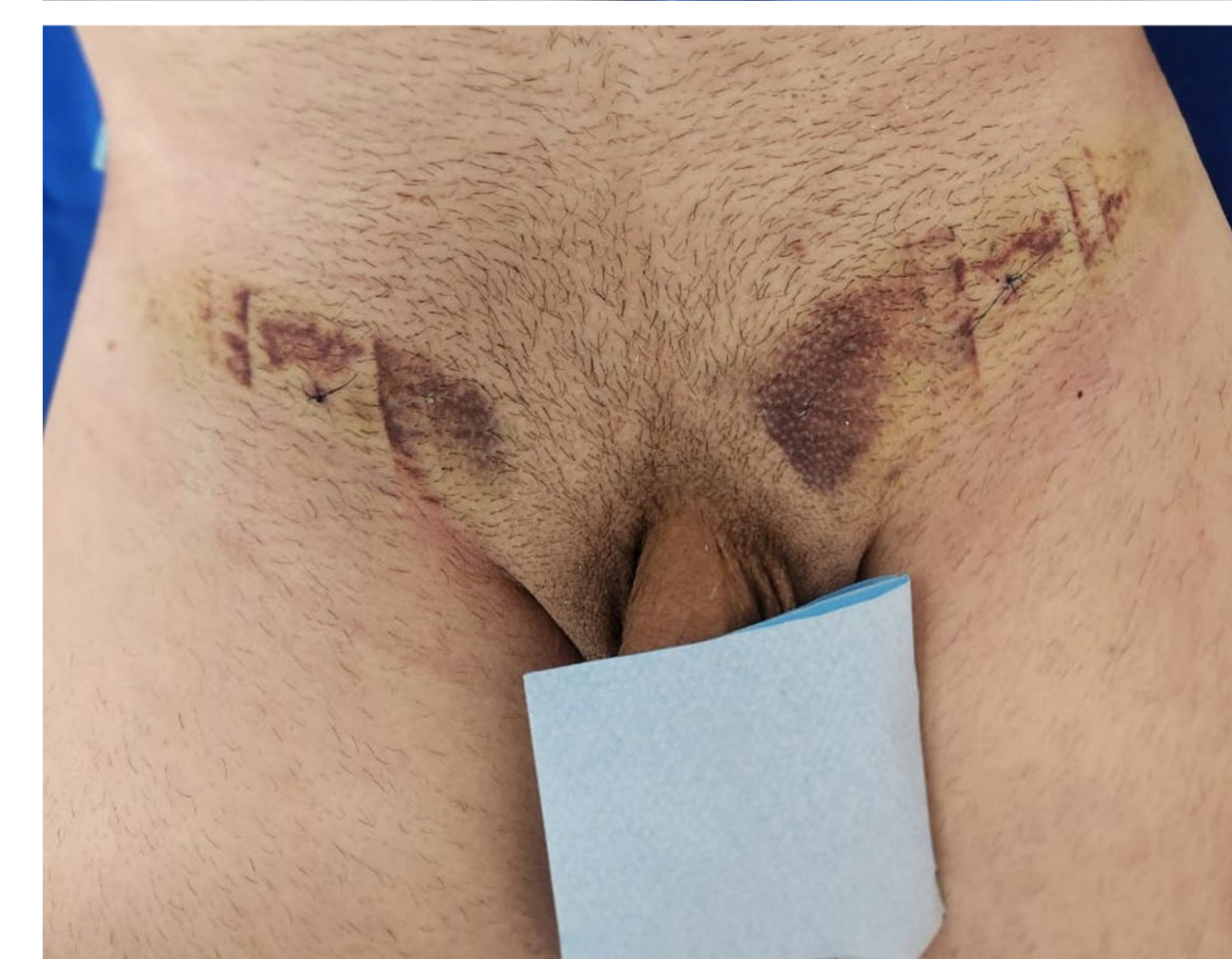
- Arwyp Hospital, Johannesburg
- data was collected prospectively over a period of 24 months
- Manta device was selected for closure of all puncture sites of the CFAs
- 11 EVAR repairs of AAA
- 4 isolated aortic stents placement
- 26 CFAs puncture site were closed with the device
- 19 cases Manta 18F was used
- 7 cases Manta 14F was used
- protocol was violated in 2 cases:
  - 1 patient - CFAs was 5mm in diameter - no closure device employed
  - 1 patient - no appropriate device available in an operating theatre



- deployment of Manta device for 3 minutes + 10 minutes manual compression of the groin on the operating table
- routine pressure dressing for 12 hours
- mobilization of a patient 16 h - 18 h after the procedure

### RESULTS

- Manta CFA closure was achieved in all cases
- no significant bleeding during procedure observed
- in 8 groins superficial haematoma noted, not requiring surgical intervention
- no post-procedural false aneurysm formation
- no seroma of the groin observed
- no femoral nerve neuropathy diagnosed



### CONCLUSIONS

- the initial experience of Manta 14F/18F vascular closure device confirms its effectiveness and safety in our setting
- Manta device obtained rapid haemostasis of a puncture site of the CFA in all our patients
- percutaneous closure of a large bore femoral access became a preferred method of aortic endovascular interventions