**Introduction**

The use of endovascular techniques to treat complex AAA remains debatable. Rethinking our concept is mandated concerning short neck and complex aortic anatomy.

**Patients and Methods:**

During the period from 2010 to 2015, a total of 134 EVAR had been done. 36 patients with complex aortic anatomy have been met with criteria outside ifu. 14 with short neck equal or less than 10mm, 8 with severe angulations more than 70 degrees, 5 with thrombus burden more than 50% and 9 with tortious, stenosed or aneurysmal iliac arteries. These patients had been treated with EVAR and followed for 1 to 4 years.

**Results**

Successful EVAR with accurate deployment was done. There was no need for secondary procedures or endoleaks. Only one patient died from visceral ischemia even after retrograde SMA stenting. 2 cases with type 1A and type 1B endoleak managed by ballooning. A single case with ruptured iliac artery that was corrected immediately with covered stent.

**Conclusion**

The technical and clinical outcomes of EVAR for cases out-side IFU are comparable to those inside IFU.