



BALLOON-ASSISTED AV ACCESS MATURATION

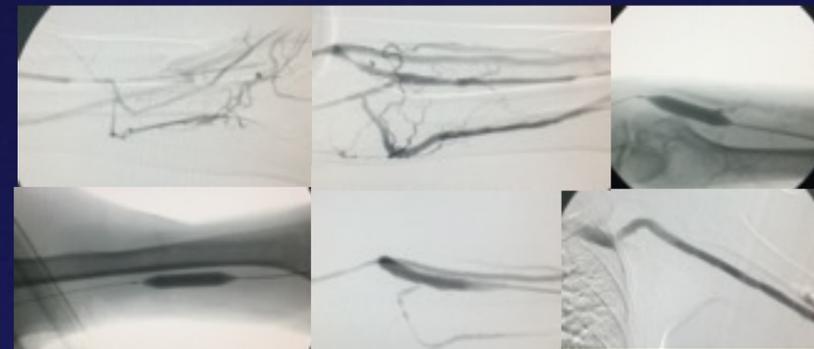
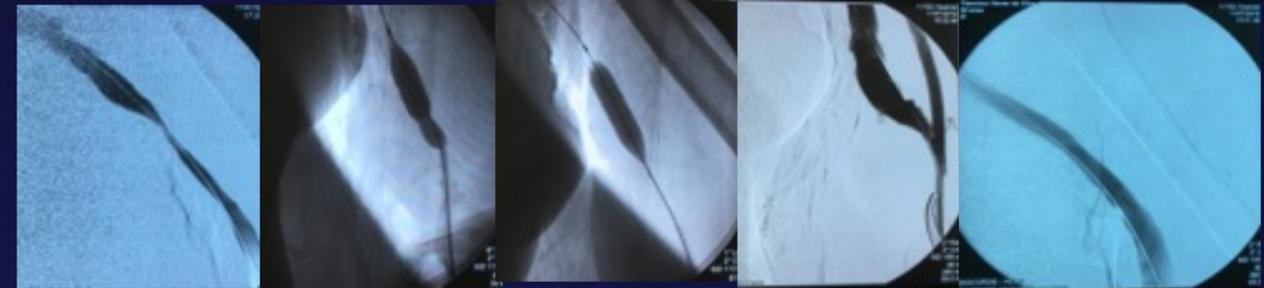
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Although fistulas are considered the best access for hemodialysis, around 23-46% of the fistulas created have problems concerning maturation. There are some recent studies on using endovascular techniques to promote satisfactory maturation of the access.

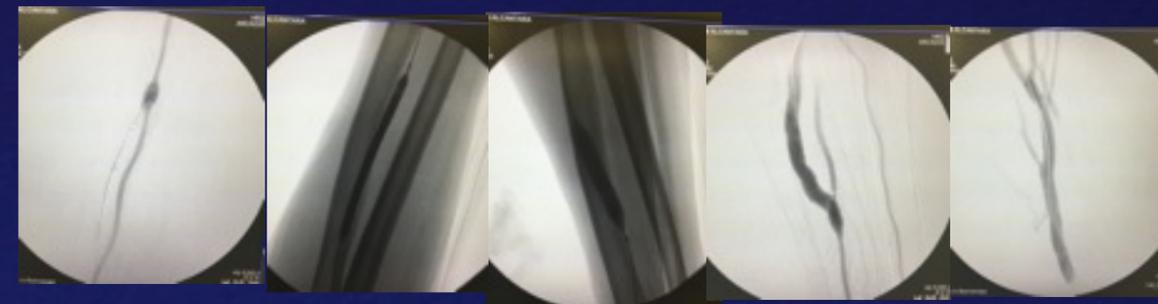
Between 2011 and 2017, 40 patients were diagnosed with non-maturation of their accesses and underwent 55 balloon angioplasty for assisted maturation of their fistulas. Non compliant high pressure balloons have been used to make the angioplasty from the anastomosis until the deep venous system, usually using the fistula as access.

Case 1: Male, high BMI, Transposed Basilic AVF with 14mm depth, impossible to cannulate. Material used: High pressure, non compliant balloons 10X40mm and 16X40mm.

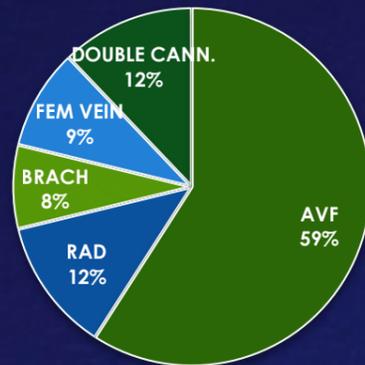


Case 2: Non maturation of the Brachiocephalic AVF after 6m. Stenosis of the cephalic vein and juxta-anastomotic. Material used: high pressure, non compliant balloons 7X40 mm and 10X40mm. Double cannulation.

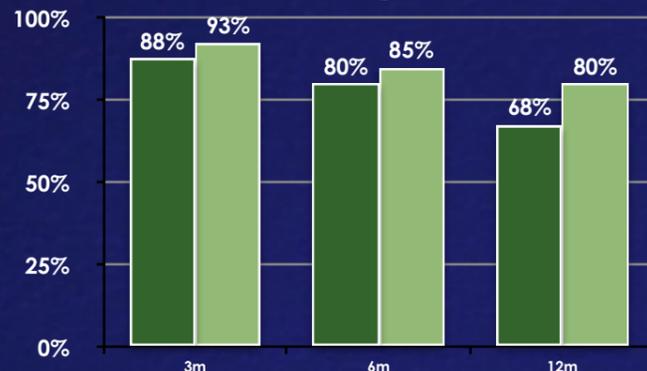
Case 3: Trombosis and non maturation of the Radiocephalic AVF after 60 days. Material used: high pressure, non compliant balloons 6X80mm and 10X40mm.



Accesses



Patency Rates



Results: Technical success in 90% of the cases. Minor complications (small hematomas) in 25% of the cases. Major complications in 10% of the cases (1 steal syndrome, 1 pseudoaneurism, 1 lost access).

Conclusion: The Balloon - Assisted AV Access Maturation is a safe and efficient technique, with high rates of clinical and technical success. Further studies are needed to help define the factors that can influence the success rates and complications of the procedure.