



Combinate implantation of mitral clip and closure of left appendage: our experience

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In recent years percutaneous mitral valve repair procedures have become more and more frequent and so have percutaneous procedures of left atrial appendage closure for non-valvular atrial fibrillation.

And there is a high probability that mitral patients also have atrial fibrillation with high thrombogenic risk and high bleeding risk that also need left atrial appendage closure. Therefore, the great opportunity to perform the two procedures at the same time. Performing the two procedures together is safe and possible in our experience if we respect some rules and some tip and tricks. The first rule is to perform first the mitral procedure and this for two reasons. First of all the atrial septum puncture site is determinant to be able to reach the mitral valve and has to be in the superior and posterior part of the septum and a wrong puncture site can mean a failure in performing the procedure; the puncture site for the appendage closure should be instead in the inferior and posterior septum, but a wrong puncture can be overcome by maneuvering the delivery or by using steerable catheters; there is coming out soon for the Abbott device a steerable delivery catheter that we already used in a premarket phase with great results. Other reason to perform first the mitral procedure is the fact that it is safer because the mitral delivery passes in front of the left appendage with a circular movement which is much less secure than the straightforward movement of the occluder device above the mitral valve; therefore the risk for the mitral delivery to hook and pull away the already implanted appendage occluder is much higher than the occluder delivery to detach a device from the mitral valve.

In our experience we treated 14 patients affected by severe mitral insufficiency and atrial fibrillation. The mean age was 68 years. 9 female.

All procedure were performed by Abbott devices.

Performing first the mitral procedure and after the left appendage procedure means putting in first a 24 f device and after a 12 or 14 f device with the risk that you could have a blood leakage from the insertion point. This can be easily avoided using in pre-implant a Perclose device that has to be tightened after putting in the smaller delivery in order to make the entry hole smaller adapting to the smaller delivery.

For all patient we observed a good outcome.