

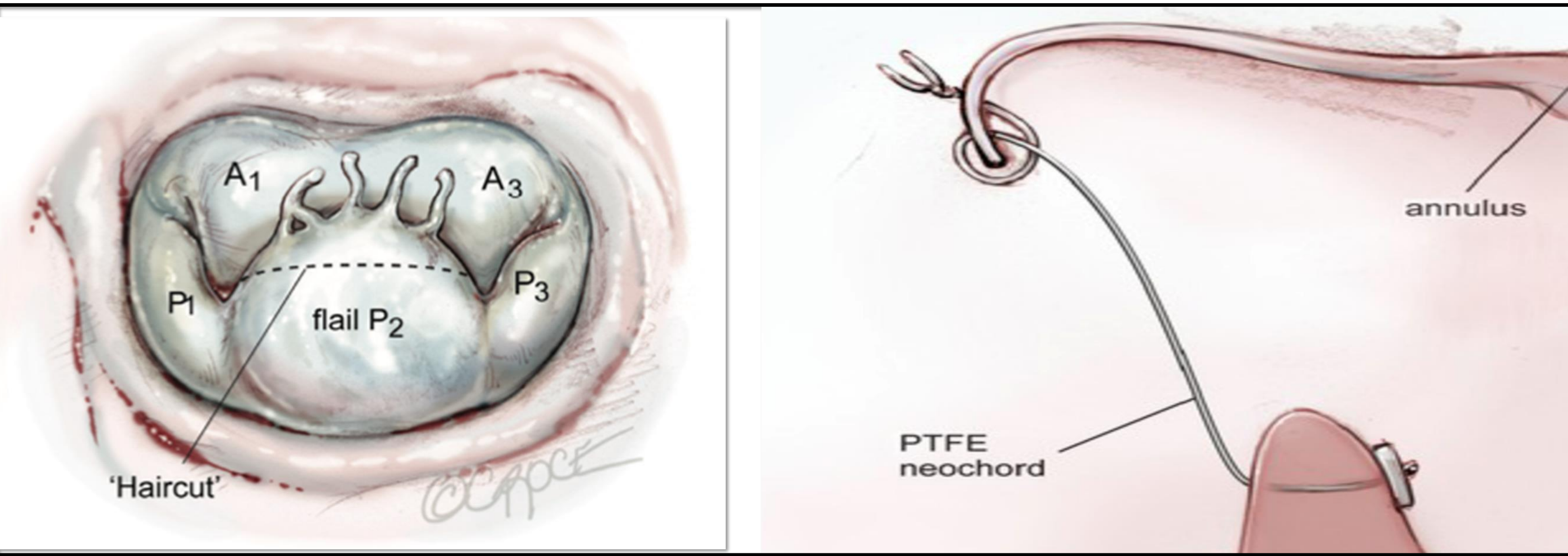
Modified Haircut technique for more durable mitral valve repair

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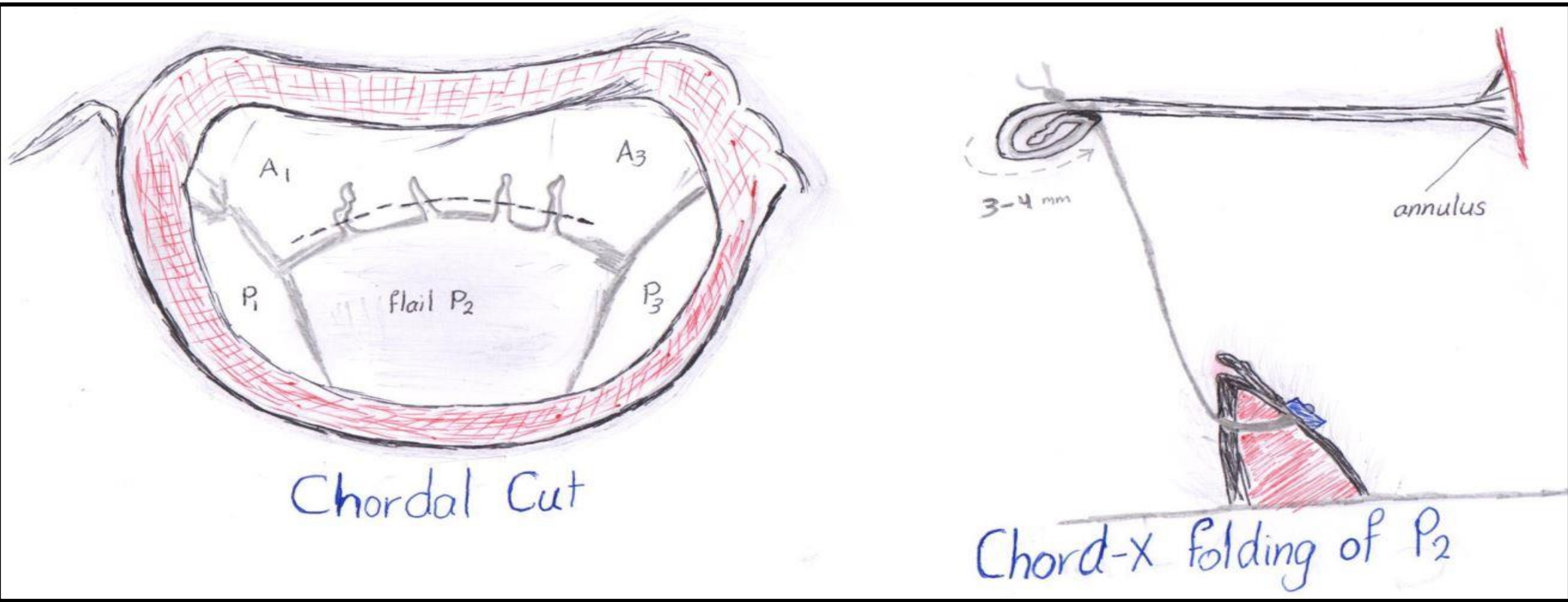
Introduction
Mitral valve repair is the gold standard operation for degenerative mitral valve regurgitation, the longevity and durability of repair remains a main concern. Multiple approaches have been proposed for Mitral valve repair with neochords implantation as well as traditional methods of leaflet resection. (1-3) A physiologic repair can maintain leaflet mobility and ensure adequate leaflet coaptation and ultimately a durable valve repair. (3,4). Adequate line of leaflet coaptation ensures optimal and durable valve function. In the respect approach, mitral leaflets are preserved, and restoration is regained with implanting artificial chordae. We present a novel technique for Mitral valve repair by providing more anatomical accuracy in inserting the Neochordae.

Isolated MV	6
MV Repair + CABG	5
MV Repair + TV Repair	2
MV Repair + LAA occlusion	2
MV Repair + PFO Repair	1

Surgical Technique
Haircut” posterior leaflet-plasty was originally described by Chu, Michael W A et al. (5) The benefits of this technique include preserving the continuity of the annular leaflets, shortening leaflet (height reduction), reslicing sections of the flail segment and restoring leaflet support using either the original or transposed chords. The original technique aims to reduce the posterior leaflet height to less than 15 mm by resecting excess segment height to the measured height of nearby scallops



In our technique, ruptured chordae ends are shaved with keeping the attached segment of the chordae to edges of the leaflet. We use the chordal attachment at the papillary muscle and the edges of the leaflet as guidance for fixation points of the neochords. Instead of resection of redundant tissue we tend to fold the free edge of the leaflet for about 3-4 mm according to the height of the leaflet. This led to more durable repair as we provide a more secure tissue and hinge at the site of chordal insertion on the leaflet. Flexible annuloplasty ring is used in all our mitral valve repairs



CONCLUSION
The modification of the Haircut technique is a simple & reproducible method for Mitral valve repair which is effective for repair of the posterior, anterior and bileaflet disease. It provides secure and durable repair by saving the tissues of the valve and adjustments guided by the anatomy of the patient.

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