Images in cardio-thoracic surgery

Unusual insertion of a mitral chord causing severe valve regurgitation

Corrado Taglieria\textsuperscript{a}, Luca Botta\textsuperscript{a,},\textsuperscript{*} Alberto Roghi\textsuperscript{b}, Antonia Alberti\textsuperscript{b}

\textsuperscript{a} Cardiac Surgery Unit, Cardiovascular Department, Niguarda Ca Granda Hospital, Milano, Italy
\textsuperscript{b} Cardiology Unit, Cardiovascular Department, Niguarda Ca Granda Hospital, Milano, Italy

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An anomalous mitral chord determining prolapse of the anterior leaflet and severe regurgitation (Figs. 1 and 2) was found in a 58-year-old woman with no history of endocarditis. This abnormality is extremely rare and its rarity can lead to a misdiagnosis. Valve repair was feasible and effective, which allowed us to avoid prosthetic replacement.

Fig. 1. White arrow shows a prolapse of A2 in part (a). In part (b), white arrow indicates the eccentric regurgitant jet directed to the posterior wall of the left atrium. There is no evidence of anomalous structures in both images.

Fig. 2. Red arrow shows the thick chord connecting the free edge of mitral anterior leaflet to the left side of the interatrial septum. White arrowhead shows the anomalous insertion at level of the patent foramen ovale. Mitral valve was repaired by resection of the aberrant chord, insertion of a couple of artificial chords on A2 and annuloplasty with a goretex hemi-ring. Foramen ovale was closed by a direct suture. Postoperative and 6-month follow-up echocardiographic examination showed absence of residual valve insufficiency. (For interpretation of the references to colour in this figure legend, the reader is referred to the web version of the article.)