Severe tricuspid regurgitation after traumatic papillary muscle rupture

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A 16-year old patient with new onset tricuspid regurgitation after a car accident 2 months earlier was referred to our department complaining of fatigue (NYHA II). Septal papillary muscle and anterior chordae rupture was detected (Fig. 1) and corrected by papillary muscle reimplantation, reinforcement with Gore-tex neo-chordae and modified DeVega annuloplasty (Fig. 2).

Figure 1: Operative view showing septal papillary muscle rupture suspended by a nerve hook and attached to the leaflet by two native chordae.

Figure 2: Postoperative echocardiographic image showing the repaired tricuspid valve.