

# 3D assessment of mitral stenosis

## Clinical Case Portal

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### Abstract

3D TTE is widely available and used for assessment of valvular disease. Familiarisation with features typical for certain disease becomes essential. Illustration of pathology can be anatomy like, increasing understanding of disease processes. Simplification of assessment tools in order to facilitate implementation in clinical practice is needed. Accurate measurements have a relative value, in conditions where there is a wide range of normal, mild, moderate and severe disease. Classification of findings as belonging to one or another category can sometimes be done without measuring dimensions, but appreciating them in rapport with anatomical structures and with the scale available in the rendering tool.

## Case Report

A typical case of mitral stenosis due to rheumatic valve disease is presented, in order to illustrate the pathology as seen in 3D imaging.

## Conclusion

3D echocardiography is an useful tool, easier to implement in clinical practice with appropriate simplifications which are not interfering with the clinical significance of pathology.

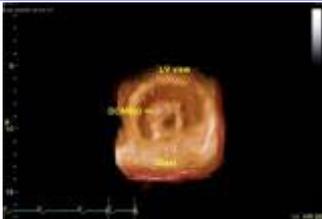
Video 1 :

[Mitral stenosis - view from the left ventricle, illustrating the 3D appearance of "doming".](#)



Fig. 1 :

[Mitral stenosis view from the left ventricle - diastolic frame showing anterior leaflet "doming".](#)



Video 2 :

[Mitral stenosis of rheumatic aethiology - thickened chordae tendinae with typical rheumatic nodular fibrotic and calcified lesions.](#)



Fig. 2 :

[Thickened mitral valve chordae in rheumatic mitral valve disease as seen from the left ventricle.](#)



Video 3 :

Mitral stenosis - "surgical view" (view from the left atrium)



Fig. 3 :

Mitral stenosis "surgical view" diastolic frame.



Video 4 :

Mitral stenosis area tracing in 2D slice of 3D volume.

