

SPLIT TYPE PRECISELY-ANCHORABLE TRANSCATHETER MITRAL VALVE SYSTEM

Abstract

A split type precisely-anchorable transcatheter mitral valve system comprises a split transcatheter mitral valve anchoring stent (10) and a transcatheter artificial biological mitral valve (20), wherein the shape and structure of the transcatheter mitral valve anchoring stent (10) are matched with the mitral valve real structure after the patient image data is subjected to three-dimensional reconstruction, the transcatheter mitral valve anchoring stent (10) is firstly delivered to the mitral valve position of the patient to be released and deformed, and the transcatheter artificial biological mitral valve (20) is in personalized precise alignment and coaptation with tissues on the mitral valve position of the patient and under the petals; the transcatheter artificial biological mitral valve (20) is delivered into the transcatheter mitral valve anchoring stent (10) to be released, the transcatheter artificial biological mitral valve (20) is released and deformed and expanded to a functional state, the transcatheter mitral valve anchoring stent (10) is again deformed and combined with the expanded transcatheter artificial biological mitral valve (20), and meanwhile, the re-deformation of the transcatheter mitral valve anchoring stent (10) enables the mitral valve anchoring stent (10) to be anchored with the lower leaflet tissue in a preset combination. The split type accurately anchored transcatheter mitral valve system can realize accurate anchoring of transcatheter mitral valve personalized based on a system designed by three-dimensional reconstruction.

FIG. 4A