

Abstract

Connecting structure of stent and valve leaflet and interventional valve-in-valve and interventional aortic valve applying same

The invention relates to a connecting structure of a stent and a valve leaflet, wherein the stent is a metal mesh tube, the valve leaflets are three fan-shaped valve leaflets arranged on the inner side of the stent, each of the three fan-shaped valve leaflets is provided with a free edge, an arc-shaped bottom edge and valve leaflet junction connecting parts extending on two sides, three connecting posts are uniformly distributed on the metal mesh tube, the junction connecting part of the fan-shaped valve leaflets comprises a radial overturning connecting part and an axial overturning connecting part, the radial overturning connecting part of each fan-shaped valve leaflet penetrates through the connecting post to penetrate from the inner side to the outer side then folds, after the inner side of the connecting post is folded, the axial overturning connecting part is connected and fixed to the connecting post through a suture. The invention also provides an interventional valve-in-valve or interventional aortic valve applying the connecting structure. The connecting structure of the stent and the valve leaflets can avoid stress concentration when the valve leaflets are opened and closed and friction generated between the stent and the valve leaflets, so that hemodynamic effects similar to bioprosthetic valves and similar durability functions are realized.

Figure 2 accompanies the abstract.