

Abstract

Connecting structure of stent and valve leaflet and interventional pulmonary valve and interventional aortic valve applying same

The invention relates to a connecting structure of a stent and a valve leaflet for an interventional aortic valve or an interventional pulmonary valve, 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, and the junction connecting parts on the two sides of each valve leaflet are folded on the inner side of each connecting post to form a cushioning portion, and then are connected and fixed to the connecting posts through sutures. The invention also provides an interventional pulmonary valve and 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 9 accompanies the abstract.