POLYESTER BIOLOGICAL PATCH FOR AORTIC ROOT ENLARGEMENT AND PREPARATION METHOD THEREOF

ABSTRACT

The present invention discloses a polyester biological patch applicable for aortic root enlargement. The polyester biological patch is a polyester fabric coated with a collagen fibril coating. The collagen fibril coating is formed by collagen fibrils via primary chemical crosslinking and secondary chemical crosslinking. The primary chemical crosslinking refers to chemically crosslinking collagen fibrils to obtain collagen fibrils after primary chemical crosslinking; the secondary chemical crosslinking refers to attaching the collagen fibrils after primary chemical crosslinking to the internal voids and surface of the polyester fabric and performing crosslinking to form the collagen fibril coating. The invention also discloses a preparation method thereof. The polyester biological patch provided by the invention features stable coating that hardly falls off, low permeability, excellent degradation resistance, good biocompatibility and compliance, as well as favorable suture strength.