

TECHNOLOGY OFFER

Vein patency preservation with isogentisin solution after coronary bypass grafting

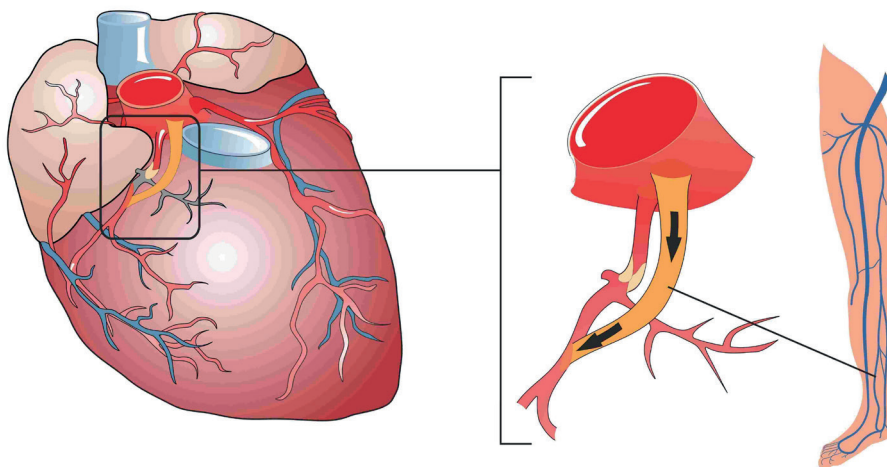
TECHNOLOGY

Incubation of vein grafts with isogentisin before bypass surgery leads to reduction of vein graft occlusion.

BACKGROUND

Autologous saphenous veins are commonly used as conduit grafts to restore blood flow to an obstructed coronary artery. Unfortunately, vein graft failure (VGF) of autologous saphenous vein (SV) remains a common complication after surgery since the venous graft must support higher pressure conditions as under physiological state. An adaptive response of venous grafts leads to thrombosis, intimal hyperplasia and accelerated atherosclerosis.

To prevent VGF we made use of the plant compound isogentisin isolated from *Gentiana lutea radix*. This compound has been previously demonstrated to inhibit smoking-caused endothelial injury in vitro.



Isogentisin inhibits intima hyperplasia in a dose dependent manner in vein grafts in vitro. Furthermore isogentisin has a positive effect on endothelial cells and therefore might help to prevent vein graft patency.

ADVANTAGES

- Improved preservation solution for isolated tissues
- Long time survival of grafts

REFERENCE:
768.18

APPLICATIONS:
Vein/ graft/ organ
preservation solutions
Grafts and implants

**DEVELOPMENT
STATUS:**
Proof of concept

IPR:
EP18213972.5 filed
19.12.2018

AVAILABLE FOR:
Cooperation /License
agreement

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