

ab initio

Neocardiogenesis

DEFINITION

Neocardiogenesis is homeostatic regeneration, repair and renewal of sections of malfunctioning adult cardiovascular tissue by means of coronary angiogenesis (vasculogenesis) and cardiac myogenesis to improve myocardial perfusion, ventricular function and to restore physio-anatomical integrity of heart; such regeneration of new functional tissue resulting from self-renewal and differentiation of, either tissue resident progenitor cells or circulating stem cells, modulated by a plethora of transcriptional factors, genes, growth factors, receptors, extracellular matrix, signaling pathways, all responding to temporospatial cues.

Etymology

Neo- is a prefix, derived from Greek that connotes a "new" or recent form of something, or a revival in a modern form.

Neo- appears in its simplest sense of "new" in words such as the following:

- Neapolis, the original Greek name of the "new city" of Naples.
- neologism, meaning a newly-coined word.
- neon, a newly-discovered (1898) noble gas.
- neonate, a newborn child.
- neophyte, a "newly planted" novice in an established field.
- neoteny, retaining infantile characteristics.

Cardiogenesis /car·dio·gen·e·sis/ (-jen´e-sis) the development of the heart in the embryo.
- Dorland's Medical dictionary