

OLFACTORYY ENSHEATHING CELL (OEC) TRANSPLANTATION FOR SPINAL CORD INJURY

Funded: UK Stem cell Foundation

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WORK IN ANIMALS

PLoS Biol 2016;14:
e1002468 (Meta analysis)

FIRST SUCCESSFUL HUMAN STUDY

BBC Panorama
21 Oct 2014



UK STUDY

- Remove olfactory bulbs from brainstem dead donors
- Culture OECs from olfactory bulbs

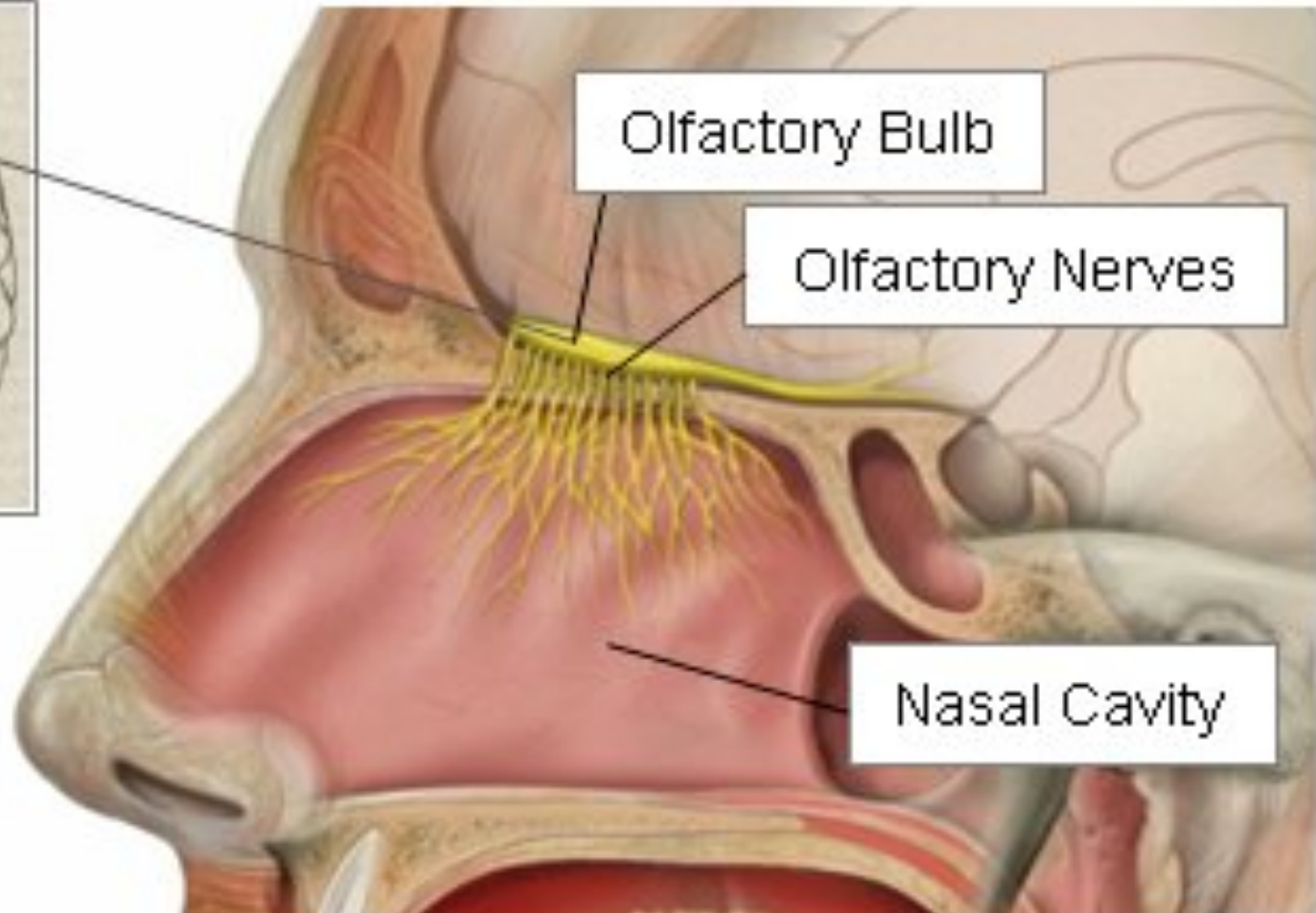
PHASE 1: Define optimal OEC culture and storage conditions in lab

PHASE 2: Implant 1 patient to assess safety

PHASE 3: Implant 10 patients

We have REC Approval for Phase 1

OLFACTORY BULBS



PROCESS OUTLINE

- Obtain informed consent **AFTER** consent for organ donation and **ONLY if** this is appropriate
- Approach family via SNOD
- **Researcher readily available** -in case family has questions / questions so there is always available support for SNOD & family

CRANIOTOMY

- **Neuroanaesthetist** & dedicated Neuro scrub nurse **ALWAYS** present
- Actual Craniotomy time 30-45min
- Minimal Blood loss

Cosmesis: no hair shave

sub-cuticular sutures

skin incision behind hairline/invisible

bone flap secured with bioplates

Craniotomy first:

OECs die with WIT > 20 min

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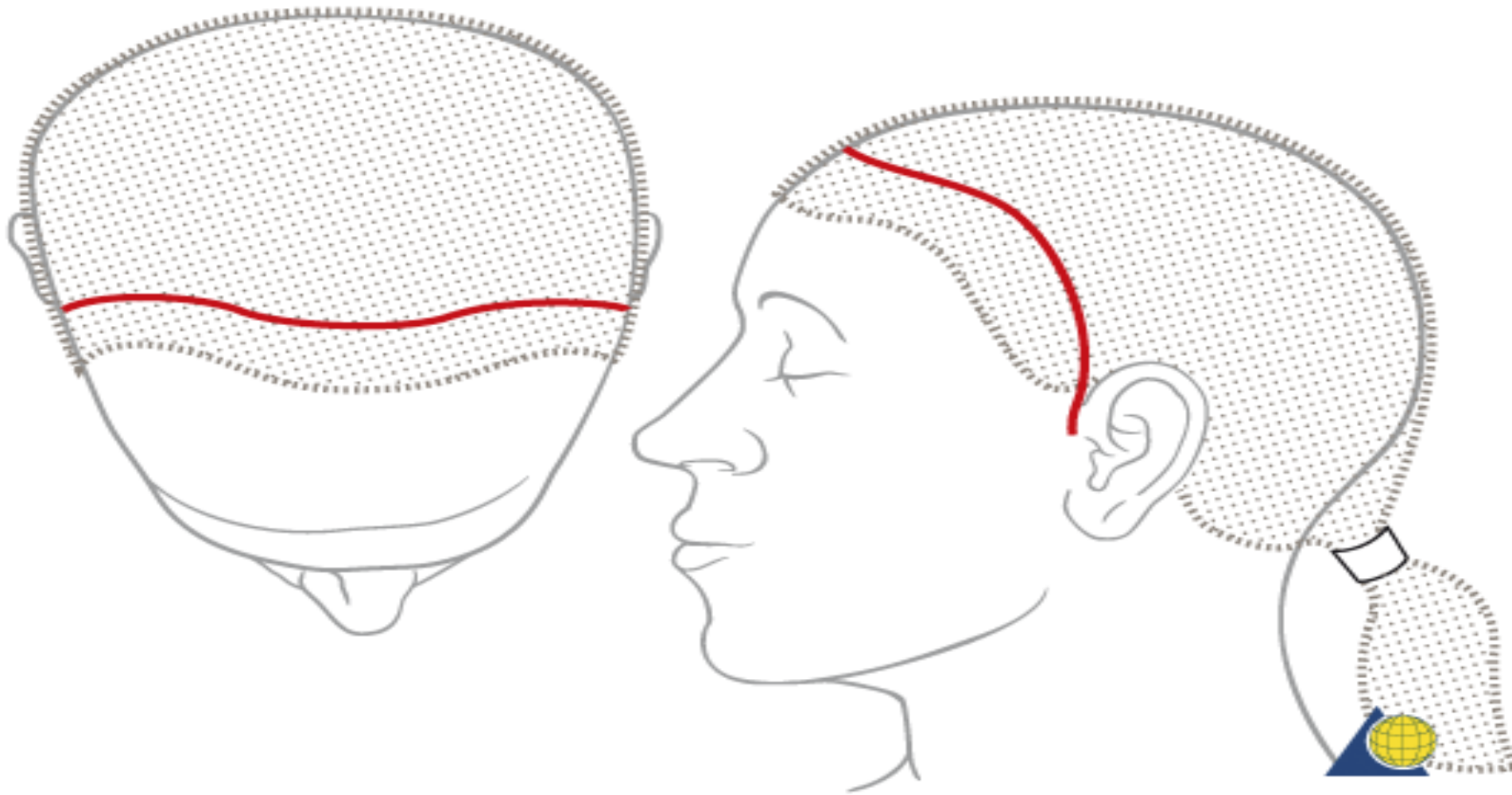
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SKIN INCISION



CRANIOTOMY

