Rich Report Outline: Development of a myocardial perfusion phantom

Preface
Contents
1 Introduction

- Read into background information on D-SPECT
- Write global background information
- Introduce the rest of the document
- Assignment was for dynamic SPECT scanning, but is that the same as using the D-SPECT? The D-SPECT can scan dynamically, and is available in ZGT
- Too much SPECT detail in introduction? Moved to literature
- Give arguments why to choose SPECT

Document overview

- Update in correspondence with meeting december 10

Abbreviations

2 Literature

- Read available literature
- Write literature review to more accurately define research questions
- D-SPECT literature
- Discuss division of work
  - Dialysis tube mimics capillaries and not tissue?
  - Mathys reported that no literature was found that manufacturers calibrate their scanners.

2.1 Phantoms

Magnetic Resonance

- Shift the limitations to later section

Computed Tomography

Ultrasound

- Veltmann phantom

Positron Emission Tomography / Single-Photon Emission Computed Tomography

Phantom discussion

  - Is contrast absorbed by tissue in the brain? Read something about the blood-brain barrier preventing such things.

2.2 Physiology

2.3 Technology

CT

MRI

PET

SPECT

Digital SPECT

Scanner comparison

Costs

Spatial resolution

Temporal resolution

Radiation

Contrast

3 Research methodology

- Define research questions
- Discuss main research question
- Define research boundaries
- Define project goals
- Implement scanner descision, became research question, will be answered in SR.
- Use limitations of phantoms to lead to research question

3.1 Research questions

Concept of operations

Requirements and Architecture

Detailed Design

3.2 Project goal

Project sub-goal

3.3 Stakeholders

3.4 Approach

General concept

3.5 Boundaries

3.6 Additional resources

Flow set-up

Control module

4 Planning

- Create graphical planning
- Create workday overview
- Create week overview
- Define deadlines
- Define meetings: frequency, type, and already planned

4.1 Workdays

4.2 Work weeks

- Discuss work days between christmas and new-year
- Discuss work days on holidays

4.3 off-days

- Update time of lectures

4.4 Deadlines

4.5 Meetings

- Plan weekly progress meetings

A Appendix: Work weeks
B Appendix: Gantt planning
Bibliography