

Human Protein Turnover Project

Gepubliceerd: 23-04-2015 Laatste bijgewerkt: 15-05-2024

1. Organ-specific protein synthesis rates will be higher than muscle protein synthesis rates. 2. Tumor-specific protein synthesis rates will be higher than organ-specific protein synthesis rates.

Ethische beoordeling	Positief advies
Status	Werving gestart
Type aandoening	-
Onderzoekstype	Observationeel onderzoek, zonder invasieve metingen

Samenvatting

ID

NL-OMON23584

Bron

NTR

Verkorte titel

HuPTuP

Aandoening

Protein synthesis in muscle tissue has been well studied in different conditions. Protein turnover in other organs however, has not yet been investigated using contemporary research methods. The goal of this study is to determine fractional protein synthesis rates in different organ tissues during surgery. Furthermore, protein synthesis rates in several tumors will be measured.

Ondersteuning

Primaire sponsor: Atrium MC Heerlen

Overige ondersteuning: Government funding

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

Fractional synthetic rate (FSR) and enrichment (MPE) in vastus lateralis and organ tissue.

Toelichting onderzoek

Achtergrond van het onderzoek

-

Doel van het onderzoek

1. Organ-specific protein synthesis rates will be higher than muscle protein synthesis rates.
2. Tumor-specific protein synthesis rates will be higher than organ-specific protein synthesis rates.

Onderzoeksopzet

Several Blood draws before and during surgery. Tissue sample during surgery at the moment tissue is removed.

Onderzoeksproduct en/of interventie

none

Contactpersonen

Publiek

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Wetenschappelijk

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

- Age 18 to 85 years
- Compos mentis
- Surgical intervention for oesophagus carcinoma, colon carcinoma, aortic valve insufficiency, lung carcinoma, renal cell carcinoma, epilepsy, hip fracture or osteo-arthritis of the knee
- Written informed consent

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

- Co-morbidities and neuromuscular disorders of the lower limbs severely interacting with mobility with limited or no opportunity for improvement (e.g. cerebral palsy);
- Peripheral arterial disease Fontaine III or IV;
- Chronic obstructive pulmonary disease (COPD) GOLD III or IV;
- Use of systemic steroids in the past four weeks, other than indicated for the specific type of surgery;
- Use anti-inflammatory biologicals (e.g. TNF-alfa blockers) in the past four weeks;
- Phenylketonuria (PKU);
- Surgical intervention in the past four weeks;
- Insulin dependent diabetes mellitus;
- Total parenteral nutrition at day of surgery;
- Pregnancy;
- Neoadjuvant chemo- or radiotherapy in the past four weeks;
- Organ-specific exclusion criteria (see below).

Organ specific exclusion criteria:

Heart:

- Medical history of ischemic heart disease
- Heart failure

Kidney:

- Diabetes Mellitus
- GFR < 20 ml/min/1.73 m²

Bone:

- Life expectancy <6 months
- Time to surgery >48 hours

Knee:

- Use of injected corticosteroids in the replaced knee the past 3 months
- Use of bisphosphonates in the past 3 months
- Rheumatoid arthritis or other inflammatory joint diseases
- Knee surgery within the last 3 months
- Osteoarthritis of the knee secondary to septic arthritis, osteonecrosis, fracture, OD and tumor
- Collagen disorders, e.g. Marfan and Ehler-Danlos

Onderzoeksopzet

Opzet

Type:	Observationeel onderzoek, zonder invasieve metingen
Onderzoeksmodel:	Parallel
Toewijzing:	N.v.t. / één studie arm
Blinding:	Open / niet geblindeerd
Controle:	N.v.t. / onbekend

Deelname

Nederland	
Status:	Werving gestart
(Verwachte) startdatum:	04-05-2015
Aantal proefpersonen:	35
Type:	Verwachte startdatum

Voornemen beschikbaar stellen Individuele Patiënten Data (IPD)

Wordt de data na het onderzoek gedeeld: Nog niet bepaald

Ethische beoordeling

Positief advies	
Datum:	23-04-2015
Soort:	Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

ID: 47497

Bron: ToetsingOnline

Titel:

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL4876
NTR-old	NTR5147
CCMO	NL51743.096.14
OMON	NL-OMON47497

Resultaten