

associations between selected blood parameters and behavioral features in a group of hospitalised forensic patients - a cross-sectional analysis

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Determining blood levels of various (micro)nutrients (Fe, Zn, Cu, Mg, vitamins B6 and D3, the essential fatty acids epa, dha and aa) and lead, as well as ferritine, in a group of forensic patients, in order to establish if these values deviate from...

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Other condition
Study type	Observational invasive

Summary

ID

NL-OMON36918

Source

ToetsingOnline

Brief title

blood parameters and behavior in forensic psychiatric patients

Condition

- Other condition
- Impulse control disorders NEC

Synonym

aggression, impulsivity

Health condition

agressie, zowel fysiek en verbaal

Research involving

Human

Sponsors and support

Primary sponsor: Altrecht GGZ (Den Dolder)

Source(s) of monetary or material Support: Financiering vindt plaats in het kader van het Innovatieplan 2009-2010 van de Directie Forensische Zorg (onderdeel van de Dienst Justitiele inrichtingen (DJI)). DJI heeft behoudens financiële verantwoording en beschikbaarstellen van de resultaten geen publicatie voorwaarden gesteld. (Zie bijlage; toekenningsbrief DJI)

Intervention

Keyword: aggression, blood lead, forensic psychiatric patients, micronutrients

Outcome measures

Primary outcome

Blood levels of:

- lead
- the fatty acids arachidonic acid, eicosapentanoenic acid and docosahexanoenic acid

- the relation between these levels and reference measures

Behavioural measures:-

- aspects of actual aggression (AVL: self rated aggressive tendencies; SDAS aggression according to staff).

Secondary outcome

Blood levels of:

- iron

- zinc
 - copper
 - magnesium
 - vitamin B6
 - vitamin D3
 - ferritine
- the relation between these levels and reference measures

Behavioural measures:-

- psychiatric diagnosis
- general health and wellbeing (GHQ-28), and psychiatric symptoms (SCL-90)
- risk assessment scores(HCR-20 scales)
- aspects of actual aggression (SOAS-R: severity and frequency of aggression incidents)

Study description

Background summary

Research shows an association between micronutrient and heavy metal blood lead levels, and psychiatric/neurological/neuro cognitive disorders. Similar associations have been suggested with criminal/antisocial behaviour. Research on the effects of the above mentioned substances on people suffering psychiatric illness who also show criminal/antisocial behaviour did not take place in a systematic way so far.

The proposed research intends to fill this void.

Study objective

Determining blood levels of various (micro)nutrients (Fe, Zn, Cu, Mg, vitamins B6 and D3, the essential fatty acids epa, dha and aa) and lead, as well as ferritine, in a group of forensic patients, in order to establish if these values deviate from reference values or values found in other populations. Furthermore, the predictive value of the above mentioned blood levels in relation to severity of psychiatric disorders and antisocial or dangerous behaviour will be studied

Study design

A preliminary, descriptive, study. Blood levels as well as relations between variables will be under investigation. Furthermore (multiple) regression techniques will be used to find out if the determined blood levels have predictive value concerning behaviour (incidents in particular)

Study burden and risks

A once-only blood sample will be asked. At the time of blood sampling a number of questionnaires will be administered. The procedure takes about 30 minutes. The risk of this procedure is limited to the (minimal) risk of venous blood sampling

Contacts

Public

Ministerie van justitie

Dolderseweg 164
3734 BN Den Dolder
NL

Scientific

Ministerie van justitie

Dolderseweg 164
3734 BN Den Dolder
NL

Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age

Adults (18-64 years)

Elderly (65 years and older)

Inclusion criteria

- having committed an impulsive and/or aggressive crime
- currently hospitalised on a forensic psychiatric ward
- any DSM-IV axis I and/or II diagnosis
- age >18 year

Exclusion criteria

- the inability to give informed consent
- Primary neurological disorder (ICD-10: F00.xx -F09.xx).
- any reason - according to the judgement of the psychiatrist - contraindicating participation

Study design

Design

Study type: Observational invasive

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Basic science

Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 18-07-2011

Enrollment: 70

Type: Actual

Ethics review

Approved WMO

Date: 12-04-2011

Application type: First submission

Review commission: METC Universitair Medisch Centrum Utrecht (Utrecht)

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
CCMO	NL26340.041.10