Treatment of bone loss and changes in bone architecture in osteopenic patients with Crohn's disease; a comparison between calcium supplementation and vitamin D alone or combined with oral Risedronate 35 mg once weekly.

No registrations found.

Ethical review	Positive opinion
Status	Recruitment stopped
Health condition type	-
Study type	Interventional

Summary

ID

NL-OMON27088

Source
Nationaal Trial Register

Brief title
Crohn and Bone study

Health condition

Crohn's disease and osteopenia.

Sponsors and support

Primary sponsor: Aventis
Source(s) of monetary or material Support: None

Intervention

Outcome measures

Primary outcome

The primary objective of this study is to determine the change in BMD, expressed as T-score, at lumbar spine and total hip as assessed by DXA after 24 months of treatment with Calcium 1g and vitamin D3 400 IU o.d., with concomitant weekly 35mg risedronate (Actonel®) compared to placebo in patients suffering from Crohn's disease.

Secondary outcome

1. To study the histomorphometric, microarchitectural and mineralization changes in bone after treatment of bone loss in patients with Crohn's disease with calcium and vitamin D alone or in combination with risedronate;

2. To determine changes in markers of bone metabolism (bonespecific alkaline phosphatase, osteocalcine, and type-1 collagen C-telopeptide);

3. To establish the incidence of non-vertebral and vertebral fractures, as measured by semi-quantitative assessment of digital, standardized radiographs of the spine.

Study description

Background summary

Title:

Treatment of bone loss and changes in bone architecture in osteopenic patients with Crohn's disease; a comparison between calcium supplementation and vitamin D alone or combined with oral Risedronate 35 mg once weekly.

Investigator(s), Study site(s):

Multicentre study in 10 centres in the Netherlands (Dutch IBD Research Group).

Indication:

Crohn's disease associated bone loss.

Objectives:

Primary:

Change in BMD at lumbar spine and total hip as assessed by T-score derived from DXA after 24 months of treatment with weekly 35mg risedronate (Actonel®) compared to placebo.

Secondary:

* Bone structure: Paired Bone biopsies (target: n=40 evaluable bone biopsy pairs, consisting of 20 treated and 20 placebo patients)

* Incidence of vertebral and non-vertebral fractures

* Changes in markers of bone metabolism.

Tertiary:

* Disease activity associated loss of bone during study period.

* Safety of weekly 35mg risedronate (Actonel®), as assessed by routine clinical, hematologic and biochemical parameters.

* Serum levels risedronate to measure absorption.

Entry Criteria:

* Male or female patients with Crohn’s disease with a BMD with a T-score value between –1.0 SD and -2.5 SD as assessed by standardized dual DXA.

* No corticosteroid treatment 3 months prior to screening or during the screening phase.

Exclusion Criteria:

* Patients known with malabsorption.

* Medication and diseases affecting bone metabolism.

* Patients with serum 25(OH)-vitamin D levels < 25 nmol/L. Supplementation for 3 months is allowed and patients will be reassessed before inclusion.

Design:

Randomized, double-blind, placebo-controlled, single country, multicentre study.

Treatment:

For both study groups: 1000mg Calcium and 400 IU vitamin D.

Group I: weekly 35mg risedronate (Actonel®)

Group II: weekly 1 placebo tablet
Patients will receive treatment for 24 months.

Sample size :

130 patients.

Measurements:

Bone Mass Density (total hip & lumbar spine; only at baseline duplicate measurement), bone markers (Bone Specific Alkaline Phosphatase, osteocalcine, C-telopeptide of collagen type-1), standardized radiographs (thoracic, and lumbar spine, semiquantitative assessed), safety, enteral disease activity, serum levels of risedronate.

Statistics:

Assuming a standard deviation in T-score of 4.7%, a sample size of 57 patients in each group will allow detection of a significant difference between the two treatments of 2,5% in lumbar spine BMD, with a type I error =5 % (2-sided), and a type II error =20 % (power 80 %). Including a 10% drop off then approx. 65 patients/group are needed.

Furthermore, it is expected that approx. 40 paired biopsies can be obtained from each group from the total recruited population. If it becomes clear during the study that this percentage cannot be reached then the number of patients to be recruited will be adapted.

Study objective

Bifosfornates in combination with vitamin D and Calcium is more effective that Vitamin D and Calcium alone for Crohn’s disease related osteopenia.

Study design

N/A

Intervention

For both study groups: 1000mg Calcium and 400 IU vitamin D.

Group I:
weekly 35mg risedronate (Actonel®);

Group II:
weekly 1 placebo tablet.

Patients will receive treatment for 24 months.

Contacts

Public
Academic Medical Center, IBD trialbureau, C2-317,
P.O. Box 22660
Maartje Ley, de
Meibergdreef 9
Amsterdam 1100 DD
The Netherlands
+31 (0)20 5666545
Scientific
Academic Medical Center, IBD trialbureau, C2-317,
P.O. Box 22660
Maartje Ley, de
Meibergdreef 9
Amsterdam 1100 DD
The Netherlands
+31 (0)20 5666545

Eligibility criteria

Inclusion criteria

1. Men and women „d 18 < 70 years of age;

2. Patients suffering from Crohn's disease of at least 3 months duration, confirmed by radiography, endoscopy and histology;

3. Quiescent stage of disease as defined by the Crohn's Disease Activity Index (CDAI < 150));

4. A BMD between ¡V1.0 SD and -2.5 SD as assessed by DXA (T-score) of lumbar spine or total hip;

5. A serum 25(OH)-vitamin D level > 25 nmol/L;

6. Patients must be able to adhere to the study visit schedule and protocol requirements;

7. Patients must be able to give informed consent and the consent must be obtained prior to any study procedures.

Exclusion criteria

1. Patients with a DXA T-score < -2.5 in lumbar spine or total hip;

2. Patients who have received bisphosphonates a year prior to inclusion, or who are known with an allergy to bisphosphonates;

3. Patients who have received calcitonin or suppressive doses of thyroxine within 1 year;

4. Patients with serum 25(OH)-vitamin D levels < 25 nmol/L (supplementation for 3 months prior to (renewed) screening is allowed);

5. Corticosteroid treatment 3 months prior to screening or during the screening phase with daily dosages above 7.5 mg prednisole-equivalent at any time;

6. A history of hyperthyroidism, Paget¡¦s disease or other metabolic bone diseases, Cushing¡¦s disease or hyperprolactinemia;

7. Female patients who are pregnant or breast-feeding;

8. Patients receiving hormonal replacement therapy;

9. A psychiatric, addictive, or any disorder that compromises ability to give truly informed consent for participation in this study.

Study design

Design

Study type:	Interventional
Intervention model:	Parallel
Masking:	Double blinded (masking used)
Control:	Placebo

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	30-08-2004
Enrollment:	130
Type:	Actual

Ethics review

Positive opinion

Date:	30-08-2005
Application type:	First submission

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
NTR-new	NL129
NTR-old	NTR163

Register	ID
Other	: N/A
ISRCTN	ISRCTN59682218

Study results

Summary results
N/A