

shunt occlusion complicated by infection which has been reported to contribute to CDI in other case reports. This case highlighted how CDI can be unmasked when a patient loses access to free water such as with altered mental status or intubation for surgery.

References

1. Central diabetes insipidus: A complication of ventriculoperitoneal shunt malfunction during pregnancy. Goolsby, Lynn et al. American Journal of Obstetrics & Gynecology, Volume 174, Issue 5, 1655-7

Reproductive Endocrinology

TRANSGENDER MEDICINE AND RESEARCH

Low Dose Cyproterone Acetate for the Treatment of Transgender Women - a Retrospective Study

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Introduction: Transgender women with intact gonads receive lifelong hormonal treatment in order to suppress physiologic androgen production. Cyproterone acetate (CA) is the most common antiandrogenic drug prescribed for this indication in Europe, with a dose range between 25-100 mg/day. **Aim:** To assess the effectiveness and safety of low dose (<20 mg/day), compared with high dose (>50 mg/day) CA treatment. **Methods:** Historical cohort study of transgender women treated in our department between January 2000 and October 2018. **Results:** There were 42 transgender women in the low dose group (LDG) and 32 in the high dose group (HDG). Age (27.9 ± 1.6 vs. 28.9 ± 1.7 years) and follow up time (16.2 ± 2.2 vs. 20.1 ± 2.1 months) were similar in the LDG and HDG, respectively. At the last available visit, testosterone levels were effectively and similarly suppressed in both treatment groups (0.6 ± 0.1 vs. 0.8 ± 0.3 nmol/L; $p=0.37$, for LDG and HDG respectively). Prolactin (659 ± 64 vs. 486 ± 42 mIU/ml, $p=0.02$), LDL cholesterol (96.1 ± 5 vs. 78.5 ± 4 mg/dl, $p=0.02$) and triglycerides (93.3 ± 9 vs. 69 ± 5 mg/dl; $p=0.02$) were higher in the HDG compared with LDG respectively. Side effects were common in the HDG (four cases of increased liver enzymes, one case of pulmonary embolism and one case of sudden death). **Conclusion:** We show for the first time that anti-androgenic treatment of transgender women with low dose CA is as effective as high dose treatment, but safer. We suggest incorporation of this observation in future guidelines.

Bone and Mineral Metabolism

BONE AND MINERAL CASE REPORTS II

Massive Bony Exostoses and Diffuse Osteosclerosis Secondary to Hepatitis C: Case Report

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MON-363

Introduction:

Acquired osteosclerosis due to hepatitis C is a rare complication. While there are previously published case reports

of this condition, to our knowledge this is the first case reported with diffusely increased osteosclerosis and prominent bony exostoses.

Clinical Case:

A 52-year old woman was evaluated in the Metabolic Bone Clinic for non-radiating left hip pain and visibly prominent hard, non-tender masses at the lateral aspect of her bilateral hips and proximal humerus. She denied history of fragility fractures, radiation exposure, risk factors for sexually transmitted diseases or substance abuse. Laboratory evaluation showed vitamin D deficiency with a value of 18 ng/mL (reference range: 25-100 ng/mL), elevated alkaline phosphate of 426 IU/L (reference range: 30-116 IU/L) and markedly increased serum C-telopeptide with a value of 1901 pg/mL (reference range: <1008 pg/mL). Plain radiographs showed multiple exostoses at the pelvis, hip, and shoulders. MRI showed extensive thoracic spine endplate sclerosis and increased sclerosis throughout the pelvis and proximal femurs. Massive calcifications adjacent to the greater trochanters were also identified. A total body bone scan revealed intensely increased uptake in multiple bones consistent with a "super scan." Bone biopsy showed sclerotic bone with extensive remodeling. Computed tomography of the chest, abdomen, and pelvis was negative for malignancy. Given the symmetric nature of these lesions and diffusely increased uptake, the diagnosis of metabolic bone disease was considered. Further testing revealed hepatitis C Ab positivity confirmed with HCV Quant PCR 1553475 IU/mL (reference range: undetected). Pathologic findings were attributed to hepatitis C and treatment for hepatitis c was initiated with subsequent improvement in alkaline phosphate to 273 IU/L.

Clinical Lessons:

Osteosclerosis represents a little-known complication of hepatitis C. It is postulated that hepatitis C itself or other unknown agents may stimulate hepatic growth factors that increase osteoblast action. The radiographic and bone scan findings are classic for acquired osteosclerosis seen as increased cortical thickening with an intensely increased uptake in multiple bones. It frequently affects the lower extremity and this condition may take years to develop. Bone formation markers such as alkaline phosphate are typically elevated and bone biopsies show increased rates of remodeling as seen in our patient. While bisphosphonates may improve the serum markers for bone formation, they have not been shown to reverse or halt the progression of skeletal changes. Thus far, there has been a single case report showing improvement in sclerosis following treatment for hepatitis C with ribavirin and interferon. Natural history, progression and treatment of this condition have not been well established.

Genetics and Development (including Gene Regulation)

GENETICS AND DEVELOPMENT AND NON-STEROID HORMONE SIGNALING I

MiR-200c Expression Profiles in Plasma of 46,XY DSD Patients of Unknown Etiology

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