Conclusion: In Haemodialysis patients, synbiotics significantly reduced serum IS, besides a marked reduction in serum Phosphorus and CRP without recorded adverse effects.

Haemostatic alterations induced by hyperthyroidism in wistar rats
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Background/Aims: Various abnormalities of coagulation occur in patients with thyroid diseases, and may range from subclinical laboratory abnormalities to clinically significant disturbances of coagulation and, rarely, major hemorrhage or thromboembolism. The purpose of the study was to investigate the changes in the hemostatic system in an experimental rat model of hyperthyroidism with special emphasis on the possible role of oxidative stress in this aspect.

Methods: The study included 24 adult male Wistar rats allocated into 2 groups: control and hyperthyroidism [hyperthyroidism was induced by intraperitoneal injection of L-thyroxine (0.3 mg/kg) daily for 2 weeks]. All rats were subjected to determination of body weight (BW), body mass index (BMI), serum levels of free triiodothyronine (FT3), free thyroxine (FT4) and thyroid stimulating hormone, complete blood picture, prothrombin time (PT), activated partial thromboplastin time (APTT), plasma levels of fibrin degradation products (FDPs), malondialdehyde (MDA) and catalase activity and C-reactive protein (CRP).

Results: Hyperthyroid group showed significant decrease in BW, BMI and their percentage change, associated with prolongation in PT and APTT, rise in plasma FDPs level, reduction in platelet count and plateletcrit, increase in white blood cell count and plasma MDA level together with decrease in catalase activity. CRP was increased, though the increase was statistically insignificant.

Conclusion: Hyperthyroidism potentiates a disturbed hemostatic balance in favor of bleeding tendency, manifested mainly by hypocoagulation, hyperfibrinolysis and thrombocytopenia. This could at least in part, be a direct effect of thyroid hormones excess as well as an effect of the accompanying oxidative stress and inflammatory state.

Effect of visceral obesity on osteoporosis in overiectomized rats
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The relationship between obesity and bone tissue has been widely studied. However, there are contradictory data about whether adipose tissue mass and bone mass are positively or negatively correlated.

Osteoporosis represents the most common metabolic bone disease. Postmenopausal women are particularly susceptible to osteoporosis when their production of estrogen declines. The Objective of this study was to investigate the possible effect(s) of increased visceral adiposity on ovariectomy-induced osteoporosis in rats.

Methods: We studied adult female Wistar rats divided into three groups: a) Sham-operated control (SHAM) rats (n = 12), rats were fed a control diet (51% of food intake from carbohydrates, 4-5% from fat, 12-13% from protein, 13% from minerals and ash) for 12 weeks, b) Ovariectomized (OVX) rats (n = 14), rats were fed a control diet as SHAM rats, c) High fat diet- fed ovariectomized (OVX- HFD) rats (n = 13), rats were fed a high fat diet (41-42% of food intake from carbohydrates, 16-17% from fat, 12-13% from protein) for 12 weeks.

At the end of the experiment, blood samples were collected. Serum levels of calcium, phosphorus, alkaline phosphatase (ALP), and osteocalcin were assayed. Unilateral left perirenal fats as a representative of visceral fat were surgically removed and weighed. Right perirenal fats and tibia specimens were isolated and processed for histological examination.

Results: Compared to SHAM, OVX- rats showed a significant increase in waist circumference (WC), visceral fat weight, and its percentage to body weight. The OVX-rats showed a significant decrease in serum calcium & phosphorus levels, and a significant increase in serum ALP. Serum osteocalcin was significantly increased in OVX-HFD group as compared to control group, while in the OVX group, it was increased but did not reach level of significance. Light microscopic examination of the tibia of the OVX rats revealed a significant decrease in the cortical bone thickness (CBT) and the trabecular bone thickness (TBT). In addition, there was a significant increase in the osteoclast number. These changes were further accentuated in OVX-HFD group.

Conclusions: Results suggest a detrimental effect of visceral adipose tissue on bone health in OVX- rats.