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AB1043 THE CLINICAL PROFILE OF GOUT SIGNIFICANTLY DIFFERS BETWEEN MALE AND FEMALE

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Background: Gout, the most common type of inflammatory arthritis, is considered as a predominant male disease. Notwithstanding, there is an increased risk of gout in female after the menopause.

Objectives: Our objective was to assess differences in the clinical features between female and male patients.

Methods: Data of newly diagnosed gout patients attending the rheumatology out-patient clinics of one secondary and one tertiary i.e. university centre in the south of the Netherlands were used. We compared baseline characteristics of males and females regarding to demographics, BMI, presence of tophi, medication use (diuretics, prophylaxis of gout and uric acid lowering drugs), serum and urine concentration of uric acid and creatinine, and comorbidities. Additional, fractional excretion of uric acid (FEUa), calculated as (urinary uric acid x serum creatinine) / (serum uric acid x urinary creatinine), was compared. FEUa gives the percentage of uric acid renally filtered and thus excreted in the urine (normal range 7%–12%). Independent t-tests and chi square were used to assess differences between females and males statistically.

Results: 66 female (16.6%) and 331 male (83.4%) patients with gout (MSU crystals 60.6 vs 68.6%, respectively) were included. At baseline, females compared to males had a significantly higher age (73±12 vs 63±13 years, $p<0.001$), BMI (30.1 ±5.2 vs 28.7±4.7 kg/m², $p=0.034$) and diuretic use (63.6 vs 27.8%, $p<0.001$). Females had also a significantly higher percentage of comorbidities, including hypertension (77.3 vs 59.5%, $p=0.003$), diabetes (48.5 vs 22.7%, $p<0.001$) and chronic kidney disease (eGFR of 46.4±24.2 vs 62.5±22.9, $p<0.001$). There was no significantly difference in serum and urine uric acid concentration, current urate lowering and prophylactic medication, presence of tophi and nephrolithiasis. Also, the FEUa was similar in females vs males (5.1±3.0 vs 4.4%±1.7%, $p=0.201$).

Conclusions: The clinical profile of gout in females significantly differs compared with males: significantly older, more advanced decrease in renal function and higher prevalence of hypertension in the females. As Dutch guidelines recommend starting with a diuretic for the treatment of hypertension in patients aged 70 +; this may have a role in explaining the higher numbers of females using diuretics. The start of diuretics has previously been associated with hyperuricemia and increases the risk of gout in the female population. Although diuretic use has proven to be a safe and effective first-line treatment for hypertension, our results suggest that diuretic use in combination with a decreased renal function is associated with an increased risk at developing gout in females, and possibly needs reconsideration. Furthermore, despite the fact that the FEUa was similar distributed between genders, females did seem to have a lower urinary uric acid excretion. However, the number of patients with tophi and nephrolithiasis and the serum uric acid level are comparable between the genders. This suggests that the urate burden is similar but that the clinical profile for the development of gout differs due to the uric acid production vs excretion. In depth analysis of our population underlines the differences in female and male gout patients which highlight the need for more research into pathophysiology and management of gout between sexes.

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AB1044 THE EDUCATION OF PATIENTS WITH GOUT IMPROVES THE EFFECTS OF TREATMENT

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Background: The recent studies about gout demonstrated the correlation between gout and cardiovascular disease (CVD). The urate lowering therapy (ULT) ameliorates the outcomes of CVD. The poor adherence with ULT in patients with gout is the main obstacle. It is induced mainly due to a lack of adequate information about the efficacy of ULT.

Objectives: This study was performed to analyse the effects of the education for patients with gout.

Methods: 116 patients with gout were enrolled and categorised by two groups, education and non-education. The face to face education was conducted by the specially educated nurse. And all participants in two groups received an leaflet about general information of gout including lifestyle advice, nutrition and drugs of ULT. The patients in non-education group were also educated by nurse on their

second visit (after two or three month from first visit). The score of patients' satisfaction using the visual analogue scale (from 0 to 100 mm) and questionnaire about satisfaction and questionnaire of patients' knowledge about disease (gout) were assessed. And we analysed patients' serum uric acid level and drug compliance.

Results: A total of 116 patients were randomised to education or non-education group equally. Patients' satisfaction in visual analogue scale was significantly higher in education group (education group: 82.7±21.0 mm, vs. non-education group: 72.8±20.7 mm, $p<0.001$).

Patients' satisfaction questionnaire was significantly higher in education group (education group: 3.89±0.5, vs. non-education group: 3.69±0.4, $p=0.017$). The level of knowledge about gout was higher in education group (education group: 7.4±2.0, vs. non-education group: 6.2±2.3, $p=0.004$). The serum uric acid level on second visit is decreased after education (baseline: 5.97±1.93 mg/dL, vs. second visit: 5.32±1.35 mg/dL, $p=0.001$). Besides drug compliance on second visit is improved after education (baseline: 89.6%±16.4%, vs. second visit: 94.3%±9.9%, $p=0.018$).

Conclusions: The face to face education for gout improved the patients' satisfaction, drug adherence and serum uric acid level. The education is very important part in treatment of gout.

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AB1045 MICROPROTEINURIA AS A MARKER OF SUBCLINICAL GOUTY NEPHROPATHY

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Background: The prevalence of kidney damage in patients with gout ranges from 30% to 70%. Currently the concept of "gouty nephropathy" (GN) comprises all renal pathologies due to gout. There is no clear opinion whether hyperuricemia is a marker of renal dysfunction or risk factor. It is important to identify the early stages of GN as its course is subclinical for a long period of time. Microproteinuria is the first harbinger of kidney damage. However, predictors of GN have not been established for today.

Objectives: To establish predictors of GN.

Methods: A total of 103 patients with chronic gouty arthritis were examined in rheumatology department of Ternopil University Hospital. All patients had no history of any kidney disease. ELISA method was used to determine microproteins in urine. Subsequently, patients were divided into 2 groups: I (n=58) – patients with subclinical gouty nephropathy, abnormal microproteins level (56.3%), II (n=45) – control group, patients without kidney damage, normal microproteins level (43.7%). Statistical analysis was performed with STATISTICA software.

Results: Patients with subclinical gouty nephropathy had a higher prevalence of arterial hypertension and metabolic syndrome. The prevalence of osteoarthritis, diabetes mellitus and dyslipidemia was the same in both groups. Also, group I patients showed longer duration of the disease, greater radiologic changes, higher levels of hyperuricemia, tophi, work incapacity, greater number of affected joints and more frequent changes in urinalysis than the control group.

Conclusions: Formation of GN is asymptomatic, causing delays in early diagnosis, but can be suspended timely. Gouty nephropathy develops in 56.3% of patients with chronic gout arthritis, and manifests by microproteinuria in the early subclinical stages. Duration of the disease, obesity, presence of tophi, arterial hypertension, hyperuricemia, increased triglycerols and low-density lipoproteins levels were found to be predictors of gouty nephropathy.

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AB1046 ALLOPURINOL USE IN CHRONIC KIDNEY DISEASE- IS THERE A DIFFERENCE IN ACHIEVING TARGET URIC ACID?- A RETROSPECTIVE STUDY

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Background: Patients with gout are recommended to treat to target uric acid level of 6 mg/dL in absence of tophi, and <5 mg/dL if tophi present. A case-controlled retrospective analysis by Stamp et al of allopurinol hypersensitivity reaction confirmed that the highest risk of severe hypersensitivity reaction is in the first few months of therapy and thus a low starting dose is recommended (as low as 50 mg in stage 4 chronic kidney disease and worse). Due to concerns related to adverse effects from Allopurinol, we hypothesised that allopurinol use would be less aggressive in terms of achieving target uric acid.

Objectives: We aim to compare the frequency of achieving target uric acid level in patients with glomerular filtration rate (GFR) of less than 60 and more than 60.

Methods: We reviewed charts of patients in a large private practice who were prescribed Allopurinol. Patients who had at least two office visits and had been on Allopurinol at least six months were included in the study. Charts were reviewed of patients for uric acid level, Allopurinol dose, GFR and any major adverse events. Major allopurinol related adverse event was defined as any adverse event leading to hospitalisation or cessation of medication.

Results: Mean Allopurinol dose for patients with GFR of more than 60 was 244. There were no major adverse events and 52 out of total 103 patients (50.5%) had achieved goal uric acid.

Mean Allopurinol dose for patients with GFR of less than 60 was 238. There were no major adverse events and 19 out of total 38 patients (50%) had achieved goal uric acid.

Conclusions: There was no difference noted in patient with GFR less than 60 or more than 60 in terms of achieving goal uric acid level. No major adverse events were noted in either group.

Disclosure of Interest: None declared

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Infection-related rheumatic diseases

AB1047 CERVICAL POTT'S DISEASE: 5 CASE REPORTS AND REVIEW OF LITERATURE

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Background: Spinal tuberculosis (Pott's disease) is the most common as well as one of the most dangerous forms of skeletal tuberculosis and accounts for 50% of all cases of skeletal tuberculosis. Pott's disease is still common in developing countries. Although the thoracolumbar junction seems to be the most common site of the spinal column involvement, cervical localization is scarce and accounts for 2% to 5% of spinal tuberculosis. Furthermore, the incidence of neurologic complications in spinal tuberculosis varies from 10% to 43%.

Objectives: The purpose of this study was to perform an updated review and present our experience with 5 cases of tuberculosis of cervical spine, including clinical characteristics, diagnostic modalities and management of spinal tuberculosis.

Methods: A review of 5 cases of cervical Pott's disease collected at the Department of Neurosurgery of National Institute of Neurology of Tunis over a period of 2 years, between 2011 and 2012 and an updated literature review.

Results: The average age of our patients was 35 years old with extremes ranging from 16 to 63 years old. There is a slight male predominance. The diagnostic delay is on average 6 months. The clinical manifestations were dominated by cervical pain (4 cases) and progressive spinal cord compression syndrome (3 cases). The biological inflammatory syndrome is found in only one patient. The intra-dermal reaction to tuberculin is positive in 4 patients. X-ray of the cervical spine, CT scan and magnetic resonance imaging were performed in all patients. All patients underwent a surgical resection. The medical treatment was administered to all our patients. The evolution was favourable, clinically and biologically, under anti tubercular treatment.

Tuberculous spondylodiscitis remains a major global public health problem in endemic countries that affects mostly young adults in their most productive years. Thoracolumbar junction seems to be the most common site of the spinal column involvement in spinal tuberculosis (95%) and cervical spine is concerned in only 5% of cases. The delayed diagnosis, between 3 and 20 months, explains the frequency of neurological deficits which are found in proportions of 20% to 40%. For the diagnosis of spinal tuberculosis, magnetic resonance imaging is more sensitive imaging technique than x-ray and more specific than computed tomography. Antituberculous treatment remains the cornerstone of treatment. Surgery may be required in selected cases. With early diagnosis and early treatment, prognosis is generally good.

Conclusions: Cervical Pott's disease is a rare localization. The diagnosis is easy in front of the cervical signs. The conservative management of cervical spine immobilisation and antitubercular chemotherapy remains a sufficient attitude to healing. Surgery is reserved in case of neurological aggravation or spinal instability.

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AB1048 EVOLUTION OF INFECTIOUS SACROILIITIS ACCORDING TO THE GERM

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Background: infectious sacroiliitis is a rather rare rheumatological emergency that has a misleading semiology because of the deep condition of the joint, the germ responsible plays an important role in this semiology and in its evolution

Methods: This is a retrospective study of 42 patients who have been hospitalised in the LA Rabta for Infectious Sacroiliitis from 1999 to 2017. the epidemiological data (age/sex) were recorded as well as the clinical radiological and biological data (symptoms, inflammatory assessment, x-rays, CT scan and/or IRM, biopsy).

Results: forty two patients were included in this study. the average age is 36,7 years old, sex distribution is: 19 women 23 men.

banal sprouts are responsible in 48.15% of cases: *Staphylococcus aureus* 28.7% *Escherichia coli* 17.07% and 2.38% streptococcus. the progression was favourable in 87.4% of the cases under appropriate antibiotic therapy for the rest: 2.38% deaths, 2.38% state of septic shock, 7.84% of complication inherent to the treatments. tuberculosis is responsible for 37.2% of infectious sacroiliitis with a favourable evolution in 77.6%, a complication related to treatment is noted in 17.64%, a subcutaneous abscess 2.34%, multifocal bone tuberculosis 2.38%. brucellosis sacroiliitis is diagnosed in 14.65% of cases, the evolution is favourable in 7.51%, in 4.76% a rapid progression towards ankylosis was noted despite appropriate antibiotic therapy, 2.38% a progression towards brucellosis chronic

Conclusions: common germs are most responsible during infectious sacroiliitis and seem to have the best prognosis, tuberculosis is responsible for various complication and its treatment is at high risk of iatrogenic which limits the therapeutic choice of the clinician. chronicity is the most feared development during Brucella sacroiliitis as antibiotic therapy is no longer effective

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AB1049 RHEUMATOLOGICAL MANIFESTATIONS DURING CHRONIC HEPATITIS C

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Background: Chronic hepatitis C (CHC) is assimilated to a systemic disease because of his multiple extrahepatic manifestations notably rheumatological.

Objectives: The aim of this study was to determinate the prevalence and the characteristics of rheumatological manifestations (RM) associated with CHC.