(probands – 45.37 ± 12.2 , siblings – 48.67 ± 11.01), which, in all probability, is due to sarcopenia. The presence of sarcopenia is also confirmed by a decrease in the sarcopenia index (probands 0.6884 ± 0.1 , sibs 0.6947 ± 0.1). On the contrary, the fat content of RA patients is higher than that of siblings.

Conclusions: Thus, in our patients cachexia is formed in RA, which is characterised by loss of muscle mass with the preservation or even growth of fat mass, which stabilises body mass indexes, and in some cases even leads to its increase (so-called cachexial obesity).

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AB0348 GRIP POWER AND INDEPENDENT DAILY LIVING IN THE PATIENTS WITH RHEUMATOID ARTHRITIS

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Background: Grip power is known to be a simple and useful objective index that can be used in the self-assessment of disease activity in patients with rheumatoid arthritis (RA)¹. However, the clinical significance of this physical function is unknown.

Objectives: The objective of this study was to clarify the relationship between the grip power and the level of activities of daily living (ADL).

Methods: The grip power was measured in 221 inpatients of our hospital with RA using a mercury dynamometer. The independence level (0: impossible, 1: incomplete and not practical, 2: practical but the means thereof are unusual, 3: normal) for 44 ADL items, including most daily activities was investigated. For each item, the site with the problem (shoulder, elbow, forearm, wrist, thumb, fingers, lower extremity and trunk) and cause of disability (pain, loss of power, decreased range of motion, abnormal prehensile pattern and fatigue) were investigated by interviewing the patient. There were 33 male and 188 female patients. The average age of the patients was 64.6 years, and the average duration of the disease was 13.3 years. Biological therapy had been given to 23% of the patients. The average grip power of the right and left hands was used.

Results: There were 14 items requiring others' assistance (level 0 or 1) in more than 10% of patients. For these 14 items of ADL, the grip power increased with the increase in the independence level ($p < 0.001$)². The site with a problem was, in order of frequency, the fingers (26.1%), wrist (14.8%) and lower extremity (14.0%). The cause of disability was, in order of frequency, pain (38.8%), loss of power (32.8%) and a decreased range of motion. Based on the results of a stepwise regression analysis, the first factor, consisting mainly of "reaching function", including "hair dressing", "washing one's body", "taking on and off one's shoes", "clipping nails", "buttoning", etc., was most strongly related to a loss of grip power and problems at the elbow, the shoulder and the wrist. The second factor, consisting mainly of the "prehensile function", including "opening a plastic bottle", "opening lids", "squeezing towels", etc., was most strongly related to a loss of grip power and problems at the wrist and the thumb. The third factor, consisting mainly of "activities involving changing body position and transfer", including "getting in and out of the bathtub", "standing and sitting", etc., was most strongly related to ageing and problems with the lower extremities and at the elbow and the wrist. In the receiver operating characteristic (ROC) curve, the grip power with the maximum Youden index was 136.5 mmHg (11.8 kg) in females and 152.5 mmHg (13.5 kg) in males. Most activities were performed independently with the grip power more than 136.5 mmHg in females (figure 1). The explanatory variables for the grip power in the female patients were ageing; a long disease duration; a high disease activity score (DAS) 28; problems at the fingers, the thumb and the elbow; decreased flexion at the shoulder and a decreased range of forearm rotation.

Abstract AB0348 – Figure 1. Minimally required grip power to perform daily activities independently in females with level 3 after age adjustment

Conclusions: The grip power was a determinant of independent daily living in patients with RA in our study.

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AB0349 OTO-RHINO-LARYNGOLOGICAL MANIFESTATIONS OF RHEUMATOID ARTHRITIS

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Background: Rheumatoid arthritis (RA) is a chronic inflammatory disorder that can damage a wide variety of body systems. Ear, nose and throat (ENT) involvement is frequent but not often reported. The purposes of our work are to determine the prevalence of ENT involvement during RA and to evaluate its correlation with RA disease activity.

Objectives: The purposes of our work are to determine the prevalence of ENT involvement during RA and to evaluate its correlation with RA disease activity.

Methods: This is a cross-sectional study of 90 consecutive RA, followed at the Rheumatology department of Monastir Teaching Hospital in Tunisia, during 06 months (November 2016 to April 2017) and 46 matched volunteers. ENT clinical examination with tonal audiometry and thyroid tests (TSH, T4, anti-Thyroperoxidase Ab (Anti TPO Ab) and Anti-Thyroglobulin Ab (Ab anti Tg) were performed.

Results: ENT involvement prevalence was 78%. The most frequent functional signs were intermittent dysphonia in 50% and dysphagia in 42% of cases. The neck examination revealed painful larynx mobilisation in 58% cases and cervical lymph nodes in 7% of cases. Indirect laryngoscopy, performed in the 67% of symptomatic patients, noted inflammatory mucosa in 38% of cases and decrease in vocal cord mobility in 8% of cases. Seventy percent patients had temporomandibular Joint (TMJ) involvement. Tonal audiometry revealed 42% of cases of deafness: 27% sensorineural deafness, 13% conductive deafness and 2% cases mixed hearing loss. The ENT manifestations significantly associated to RA compared to the witness group ($p < 0.01$) were intermittent dysphonia, dysphagia, painful larynx mobilisation, inflammatory nasal mucosa, painful TMJ and deafness. Active disease (DAS 28 > 3.2) is statistically associated with deafness ($p \leq 0.048$) and TMJ involvement ($p \leq 0.009$). Logistic regression study shows that RA duration over 10 years was associated to laryngeal dyspnea (OR=4.4, $p \leq 0.012$, IC (95%) [1.377, 14.134]) and deafness (OR=3.8, $p \leq 0.03$, IC(95%) [1.142, 12.882]). In the other hand, RA moderate functional handicap is a protective factor (OR=0.123, $p \leq 0.016$, IC (95%) [0.076, 0.772]) of ENT involvement and biotherapy use was associated to thyroid involvement (OR=7.8, $p \leq 0.017$, IC(95%) [1.431, 43.175]).

Conclusions: ENT involvement is a very common, usually asymptomatic extra-articular manifestation during RA. It is, mainly, TMJ involvement, deafness and dysphonia. The main relevant determinants are RA disease activity and duration.

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AB0350 TEMPORO-MANDIBULAR JOINT INVOLVEMENT IN RHEUMATOID ARTHRITIS

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Background: Temporomandibular joint (TMJ) disorder in rheumatoid arthritis (RA) may be associated with significant osteoarticular destruction and may be responsible of significant functional impairment.

Objectives: We aimed in this study to determine the prevalence of TMJ involvement and its correlations with RA parameters.

Methods: We report a descriptive monocentric cross-sectional study of 90 consecutive RA, followed at the Rheumatology department of Monastir Teaching Hospital in Tunisia, during 06 months (November 2016 to April 2017) and 46 matched volunteers. Clinical assessment and stomatological examination were performed in all cases.

Results: Sixty-three RA patients out of 90 (70%) had TMJ involvement. TMJ painful mobilisation, mastication difficulties, swollen TMJ, dental malocclusion and limitation of mouth opening were noted in 55 (81%), 49 (74%), 20 (30.3%), 19 (29%) and 8 (12%) of cases, respectively. Compared with the control group, painful palpation of TMJ ($p<0.000$) was significantly associated with RA.

In RA, TMJ disorder is more common in adults between 40 and 60 years of age, patients with HAQ>0.5 and a high total Vander Heijde Sharp radiographic score (SS). TMJ painful mobilisation is significantly associated with increased body mass index (BMI). Swollen TMJ is significantly associated with age (more frequent in elderly subjects), increased BMI, high RA disease activity (high DAS 28 ESR and/or DAS 28 CRP) and HAQ>0.5. Limitation of mouth opening is significantly associated with age (more common in elderly subjects), overweight, high methotrexate dose (20 mg/day), leflunomide and biotherapy use. Dental malocclusion was significantly associated with high doses corticosteroids (more than 5 mg/day). Mastication difficulties are significantly associated with more than 10 year RA duration, HAQ>0.5 and radiological impairment.

Conclusions: Temporomandibular disorder is frequent in RA (70%). TMJ disorder is observed especially in active (high DAS 28), serious (radiological impairment, HAQ>0.5) and advanced (more than 10 year duration) RA. Physicians must be careful to assess systematically TMJ in RA patients.

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AB0351 DIFFERENTIAL PERCEPTION ABOUT THE CSDMARDS ON DRUG-INDUCED INTERSTITIAL LUNG DISEASE BETWEEN RHEUMATOLOGISTS AND NON-RHEUMATOLOGISTS

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Background: As disease modified anti-rheumatic-drugs (DMARDs) were the mainstay in the treatment of rheumatoid arthritis (RA), the opportunity for general physicians to also prescribe DMARDs has recently increased in Japan. After DMARDs were initiated by specialists, subsequent drug prescription by general physicians during remission should be expected¹. However, general physicians

are more likely than rheumatologists to feel it difficult to accept patients taking even conventional synthetics (cs) DMARDs but not biologics and such discomforts may be potential barriers to cooperative management between specialists and general physicians². One of the reasons is because some csDMARDs such as methotrexate and leflunomide may induce pneumonitis or worsen RA-related pre-existing interstitial lung disease (ILD) as a rare but severe adverse event³. To minimise the risk, rheumatologists may choose low-risk csDMARDs smartly when the patients are concomitant with risk factors on ILD.

Objectives: To measure the physicians' perspective toward the risk of each csDMARDs on drug-induced ILD and their attitude in prescribing the csDMARDs to a pre-existing ILD case.

Methods: A questionnaire was given in an internet survey to registered physicians who take care of more than ten patients with RA in Japan. Topics covered were i) how is the risk of each csDMARD for drug-induced lung injury compared to methotrexate, ii) which csDMARDs should be applied to a case with mild pneumonitis on the chest CT. Cross tabulation analysis and χ^2 test as a statistical analysis was performed.

Results: A total 184 physicians consisting of 66 rheumatologists (36%) and 118 non-rheumatologists (64%) responded. The physicians' mean age was 45 years old. The rheumatologists tended to belong to rheumatology and take care of more than 200 RA patients per month in university hospitals. On the other hand, the non-rheumatologists tended to belong to general medicine and manage less than 50 patients per month in their clinics. The csDMARDs except for methotrexate were more significantly prescribed by the rheumatologists. All rheumatologists but 24% of non-rheumatologists had managed RA patients with exacerbated ILD. On physicians' perspective toward the risk of each csDMARD, the rheumatologists considered that LEF was equal to or higher than MTX and that cyclosporine A (CyA), tacrolimus (TAC), salazosulfapyridine (SASP) was relatively safer (Figure A.). In cases with pre-existing ILD, more rheumatologists agreed to use the csDMARDs except for methotrexate and leflunomide. (Figure B.)

Abstract AB0351 – Figure 1. A) Physician's opinion about how is the risk of the following csDMARDs for drug-induced ILD compared to methotrexate. B) Physician's opinion about if the following csDMARDs should be applied to a case with mild ILD on the chest CT.

R: rheumatologists, non-R: non-rheumatologists, MTX: methotrexate, LEF: leflunomide, CyA: cyclosporine A, TAC: tacrolimus, SASP: salazosulfapyridine, BUC: bucillamine, IGU: iguratimod

Conclusions: We can find the gap of risk perception about each csDMARDs between rheumatologists and non-rheumatologist and the difference of attitude in prescribing to patients concomitant with risk factors. Considerable consensus and additional enlightenment to general physicians should be necessary.

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