(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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