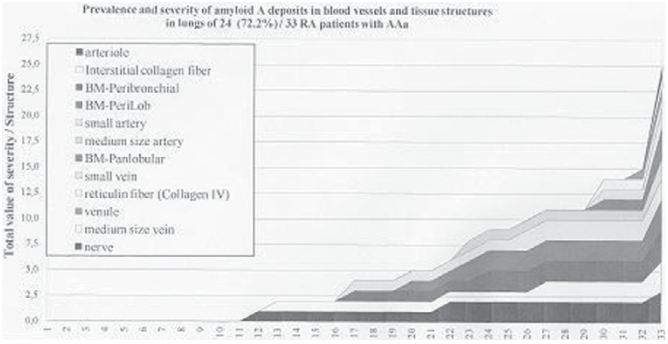
At least four tissue samples of lungs (from apical and basal regions of both lungs) were available for histologic evaluation in 33 of these 34 patients.
RA was confirmed clinically according to the criteria of the ACR.
The presence of amyloid A deposits in various structures of the lungs was determined histologically by amyloid specific Congo red staining, according to Romhányi [2].
The extent of amyloid A deposition was evaluated by semi-quantitative, visual estimation on a 0 to 3 plus scale, based on the number of involved tissue structures per light microscopic field [1]. ("0": no amyloid deposits, "1": Sporadic, minimal amyloid deposits on different tissue structures, "2": less than five, "3": five or more involved tissue structures per microscopic field at objective magnification of x20)
Results: Amyloid A deposition in the lungs was detected in 24 of 33 (72.2%) patients.
Amyloid deposition in various structures does not begin at the same time.
In the early stage of systemic amyloidosis there were histologically detectable amyloid deposits only in a few structures (arterioles, interstitial collagen fibers, peribronchial and perilobular basement membranes). In other structures (small and medium size arteries, panlobular basement membranes, small veins, collagen IV reticulin fibres, venules, medium size veins and nerves) deposits were seen only in late stages of amyloidosis (with massive involvement of the mentioned structures).



Conclusions: Amyloidosis is a progressive, cumulative process, involving in its early stage only a few structures in some organs, and increasingly more in the later stages of the disease [1]. Amyloid A deposition starts in the most frequently involved structures of the most frequently involved organ [1].
In the lungs amyloid A deposition starts in the wall of arterioles and in interstitial collagen fibers. As time progresses, basement membranes of peribronchial and peripheral regions of lobules, small and medium sizes arteries become involved. Still later panlobular deposition of basement membranes, small veins, reticulin fibers (collagen IV) of subpleural fat tissue, venules and medium size veins become involved. The involvement of nerves indicates advanced stages of amyloid deposition in the lung.
This chronology of amyloid A deposition allows an indirect assessment of the stage of amyloidosis. Based on the involvement of structures in lung biopsy specimens the pathologist may be able to estimate involvement of the other structures, even if not present in the sections. Involvement of arterioles alone (without involvement of small arteries) indicates an early stage of amyloidosis, whereas amyloid A deposits in veins or peripheral nerves suggests an advanced stage with massive involvement of other pulmonary structures.
References:
[1] Bély M, Apáthy Á: Clinical pathology of rheumatoid arthritis: Cause of death, lethal complications and associated diseases. 1–440 pp. Akadémiai Kiadó, Budapest 2012 http://www.akkrt.hu.
[2] Romhányi G (1971) Virchows Arch 354, 209–222.
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AB0291 EPIDEMIOLOGY AND COMORBIDITY OF RHEUMATOID ARTHRITIS IN UPPER EGYPT, A HOSPITAL BASED STUDY

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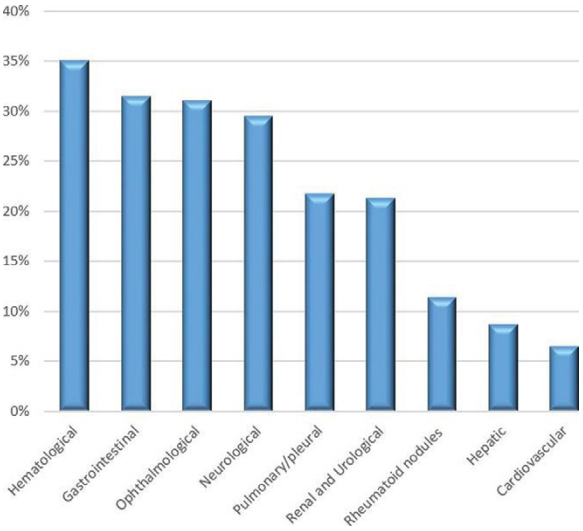
Background: Rheumatoid arthritis (RA) is one of the commonest autoimmune diseases. It affects about 1% of the population worldwide (1). The prevalence of RA varies widely between different countries (2). Not only the prevalence of the disease which differs among different continents, races, ages and socioeconomic levels but also the disease pattern. Studies explaining the epidemiology of RA in Egypt in general and in upper-Egypt, in particular, are very limited (3).
Objectives: To estimate the comorbidity of rheumatoid arthritis and its relation to disease activity, duration, disease pattern and demographic features of RA patients in upper Egypt.
Methods: This study was carried out on 923 patients who fulfilled ACR/EULAR criteria 2010. All of them live in Sohag governorate and aged 18 years or older DAS28-ESR score, first involved joint, joint distribution, disease pattern, extra-articular comorbidities including gastrointestinal, urinary, cardiac, haematological and neurological were estimated. The activity of daily living was valued by Erlangen score (E-ADL).
Results: The mean age of the participants was 45±10.9 years, with a range (19–70). The median of the disease duration was 5 years, with a range (0.5–40 years). Most of the participants were female (691, 74.9%). Disease onset was gradual or insidious in 94.3% of cases and acute in 5.7% of them. First joint group affected were the small joints of the hands (MCPs and PIPs), recorded in 48.9% of cases, Followed by wrist joints (29.3% of cases), then knees (9%), ankles and small joints of the foot (6%) and lastly other joints collectively recorded in only 6.8%. The commonest extra-articular comorbidities were haematological, seen in 323 cases; 35%, followed by gastrointestinal in 290 cases (31.4%), then ophthalmological in 31%, entrapment syndromes in 29.4%, pulmonary in 21.7%, urological in 12.4%, rheumatoid nodules in 11.4%, liver cirrhosis in 8.7%, renal impairment in 8.5% and Cardiovascular diseases in 6.5%. The activity of daily living (E-ADL) showed that most of the cases fell in score 4 (58.2%). Regarding DMARDs treatment of the study population, Methotrexate (MTX) was used regularly by 78.3% of cases, hydroxychloroquine (HCQ) by 78.1%, followed by Leflunomide (LEF) by 26.4% and sulfasalazine (SSZ) by 13.1%. The majority of cases used combination therapy of either MTX+HCQ, MTX+SSZ, MTX+HCQ+SSZ or MTX+LEF. Regarding other drugs, 99% of cases used NSAIDs (regularly in 30.2% and on demand in 68.8%). Steroids were regularly used by 28.8% of cases.



Conclusions: The commonest comorbidities were haematological, gastrointestinal, ophthalmological and neurological ones; respectively. Erosion, deformity and Das28-ESR score have a great impact on E-ADL score.
References:
[1] Gibofsky A. Overview of epidemiology, pathophysiology, and diagnosis of rheumatoid arthritis. Am J Manag Care. 2012;18(13 Suppl):S295–302.
[2] Ferucci ED, Templin DW, Lanier AP, editors. Rheumatoid arthritis in American Indians and Alaska Natives: a review of the literature. Seminars in arthritis and rheumatism; 2005: Elsevier.
[3] El-Labban AS, Omar HAA, El-Shereif RR, Ali F, El-Mansoury TM. Pattern of young and old onset rheumatoid arthritis (YORA and EORA) among a group of Egyptian patients with rheumatoid arthritis. Clinical medicine insights Arthritis and musculoskeletal disorders. 2010;3:25.
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AB0292 CLINICAL FEATURES OF RHEUMATOID ARTHRITIS AT 75 YEARS OF AGE AND OLDER IN JAPAN – COMPARISON WITH POLYMYALGIA RHEUMATICA IN THE SAME AGE GROUP

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Background: As Japan is a super-aged society, we have many chances to care for elderly patients in our hospital. Elderly-onset rheumatoid arthritis (RA) (onset age >60 years) may present similar symptoms to those of polymyalgia rheumatica (PMR). We consider that differential diagnosis of RA and PMR is more difficult in patients over 75 than those under 74 in clinical practice.
Anti-cyclic citrullinated peptide antibody (ACPA) was reported to be a helpful tool in the differential diagnosis of EORA from PMR. However, when elderly patients with negative ACPA complained of bilateral shoulder and/or girdle pain, it was difficult to differentiate PMR from RA.
Objectives: The study aimed to explore clinical features of RA and PMR at onset age 75 years. For the present investigation, we used a novel diagnostic