

Ocular manifestations of Rheumatoid arthritis.

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الخلاصة

يعتبر التهاب المفاصل الروماتزمي (الرتثوي) اكثر انواع التهابات المفاصل الروماتزمية شيوعا حيث ان الامراض الروماتزمية هي امراض مناعية تؤثر على معظم اجهزة الجسم. اجريت هذه الدراسة على 56 مريض من المرضى المصابين بالتهاب المفاصل الروماتزمي في مستشفى الديوانية التعليمي وكانت اثار المرض على العينين ظاهرة عند 18(32%) من المرضى. معظمهم كانوا يعانون من جفاف العينين, من هذا نستنتج ان كل مريض مصاب بالتهاب المفاصل الروماتزمي يحتاج الى فحص سريري للعينين .

Summary

Rheumatoid arthritis is the most common inflammatory arthritis of rheumatoid diseases which are group of immune mediated multisystem diseases. To find out the clinical ocular manifestations of rheumatoid arthritis & to ensure the importance of ophthalmologic assessment for each patient with rheumatoid arthritis. 56 patients attendant to the rheumatological unite in Al-Diwaniya Teaching hospital, examined by (Visual acuity, slit lamp biomicroscopy, tonometry, tear breakup time, Schirmer test, & fundoscopy). of 56 patients; 18(32%) had positive ocular findings. The most common finding was dry eye; 9(18%) of patients.

Key words: Rheumatoid arthritis, dry eye, scleritis, & uvietis.

Introduction

Rheumatoid diseases are group of immune mediated multisystem diseases, which could be seropositive such as rheumatoid arthritis (RA) & systemic lupus erythmatosus (SLE) or seronegative such as ankylosing spondylitis, psoriasis, Rieter disease, and others. ^[1]

Rheumatoid arthritis is the most common inflammatory arthritis and hence an important cause of potentially preventable disability, clinically it is deforming, small and large joints polyarthritis, often associated with systemic disturbances. The clinical course is usually life long, with intermittent exacerbations and remission. The prevalence of the disease is more common and increases with age, with 5% of women, and 2% of men over 55 years being affected^{[1],[2]}

RF is an autoantibody directed against IgG immunoglobuline. It can be detected by a variety of tests including sheep red blood cell agglutination, and enzyme linked immunosorbant assay (ELISA), RF is a useful marker for the presence of rheumatoid arthritis.

Criteria for diagnosis of Rheumatoid arthritis: (according to the American Rheumatism Associations 1988)

- *Morning stiffness>1 hour.
- *Arthritis of three or more joints.
- *Arthritis of hand joints.
- *Symmetrical arthritis.
- *Rheumatoid nodule.
- *Rheumatoid factor.
- *Radiological changes.
- *Duration of 6 weeks or more.

The extra-articular manifestations usually caused by systemic inflammation; anorexia, weight loss, and fatigue are the most common, followed by musculoskeletal (osteoporosis, and tenosynovitis), hematological (anemia, thrombocytopenia, and eosinophilia), cardiac (pericarditis, myocarditis, and endocarditis), pulmonary (nodules, pulmonary effusion, fibrosing alveolitis), neurological (cervical cord compression, and compressive neuropathies). The ophthalmological features are of two aspects 1st one results from the disease itself and the other from the medication used such as Chlorquine and systemic steroid.

The most common ophthalmological features is keratoconjunctivitis sicca (secondary sjogren syndrome). Uncommon is nodular episcleritis, scleritis, peripheral ulcerative keratitis, anterior uveitis, and rarely acquired superior oblique tendon sheath syndrom.^{[1],[3]}

In juvenile rheumatoid arthritis the eye is often white and uninflamed in appearance. Symptoms may range from no pain to moderate pain, photophobia, and blurring. Often, the eye disease is found incidentally during routine examination.

Children with rheumatoid arthritis should have at least each six months slit lamp examination. Chronic inflammation result in peripheral anterior synechiae, posterior synechia, cystoid macular edema, vitreous opacification, cataract, and chronic calcific band keratopathy. In severe cases secondary glaucoma, and cyclitic membrane.^{[4],[5],[6]}

Patients and methods

The study was conducted on 56 patients attendants of Rheumatologic unit in Al-Diwaniya Teaching hospital, all of them were diagnosed by the senior call in that day (in the rheumatological unit), during October 2007, until March 2008.

A detailed history of eye symptoms with their durations was obtained and a complete ocular examination was done on every patient (visual acuity, slit lamp biomicroscopy, tear break up time, tonometry, Schirmer test, and fundoscopy).

Statistical analysis done by frequency, percentage, Chi-Square test, & degree of freedom for each one of the positive ocular manifestations.

Results

The incidence of ocular lesions in that study is 32%; 37.5%, of males, and 32.2% of females as shown in the table below. Keratoconjunctivitis sicca (Drye eye) was the most frequent positive ocular manifestations; it affects 16% of patients.

Two cases of juvenile rheumatoid arthritis, one of them had no positive ocular findings while the other one affected by chronic anterior uvietis, posterior synaechia, and cataract.

Frequency distribution of positive ocular manifestations in relation to the patients' Sex.

Positive ocular manifestations	Male(8)	Female(48)	Total(56)	percentage	X2	df
Dry eye	1	8	9	16%	0.766	1
Secleritis	1	2	3	5.3%	0.332	1
Chronic anterior uvietis		1	1	1.8%	0.415	1
Posterior subcapsular cataract	1	2	3	5.4%	0.555	1
Open angle glucoma		2	2	3.6%	0.680	1
Total(+ve)	3	15	18	32%	0.726	1
Percentage	37.5%	31.2%	32%			

Discussion

The incidence of ocular lesions in that study is 32%; 37.5%, of males, and 32.2% of females, which is coincident with that founded by Ferry, Reddysc, Cuts D....et al.^{[7][8],[10]}.

Keratoconjunctivitis sicca (Drye eye) was the most frequent positive ocular manifestations; it affects 16% of patients which is slightly less than that founded Gordana, and the above mentioned searchers. We haven't notice any case affected by keratitis, and or peripheral corneal melting.^[9]

Two cases of juvenile rheumatoid arthritis, one of them had no positive ocular findings while the other one affected by chronic anterior uviectis, posterior synaechia, and cataract, this findings go with that founded by Cassidy & Kotaniemi...et al.^{[11],[12]}

Side effects of long term steroid founded in two cases, both of them have posterior sub capsular cataract, and open angle glaucoma.

Conclusions

We have two aspects of ocular affections in Rheumatoid arthritis 1st one is the disease itself the other one is the side effects of its treatment such as steroids, and or disease modifying drugs, so each patient should has ophthalmological assessment.

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