

Joint Event

11th International Conference on

OSTEOPOROSIS, ARTHRITIS & MUSCULOSKELETAL DISORDERS

&

10th INTERNATIONAL CONFERENCE ON ARTHROPLASTY

December 04-05, 2017 | Madrid, Spain

Decision support tool for diagnosis of Rheumatoid Arthritis

Alireza Sadeghpour^{2,3}, Samira Abbasgholizadeh Rahimi¹, Jose L Salmeron^{4,5,6} and Amir Mohammad Navali^{2,3}

¹Université Laval, Canada

²Tabriz University of Medical Sciences, Iran

³Shohada University Hospital, Iran

⁴Universidad Autónoma de Chile, Chile

⁵University of Hradec Králové, Czech Republic

⁶Pablo de Olavide University, Spain

Rheumatoid Arthritis (RA) is a chronic systemic inflammatory disease that influence on joints and muscles and can result in noticeable disruption of joint structure and function. Early diagnosis of RA is very crucial in preventing disease's progression. However, it is a complicated task for General Practitioners (GPs) due to the wide spectrum of symptoms, and progressive changes in disease's direction over time. The aim of this presentation is to summarize our work in development of a decision support tools for GPs in early diagnosis of RA and describes a small-scale test which has been conducted at Shohada University Hospital, Iran, for evaluating the accuracy of the proposed tool. This study proposed an advanced decision support tool based on consultations with a group of experienced medical professionals (i.e. orthopedic surgeons and rheumatologists), and using a well-known soft computing method called Fuzzy Cognitive Maps (FCMs). Briefly, considering obtained results in real practice, we believe that this tool can be useful in assisting GPs in early diagnosis of patients with Rheumatoid Arthritis. Indeed, in the lights of the proposed decision support tool: (i) GPs can evaluate patients' RA disease's severity more accurately and easily, (ii) the required time for patients' diagnosis could be decreased, (iii) quality of life of patients and quality of care may be improved, and more importantly (iv) the risks that could threaten patients due to the wrong or late diagnosis will be diminished.

Biography

Alireza Sadeghpour is an Associate Professor and Chair of Orthopedic Surgery department at Tabriz University of Medical Sciences. Sadeghpour is also currently serving as a Director and Chairman of Shohada University Hospital. He received his M.D. degree in 1992 and his Iranian Board Certificate of Orthopedic Surgery in 2000. His research interests are in Pelvis and Hip Surgery including Arthroplasty, hip preserving Surgery and Trauma.

sadeghpoura46@yahoo.com

Notes: