

**Abstract:*****Introduction and aim:***

*Osteoarthritis is the common joint disorder in the world. Because of direct and indirect medical costs patients suffer heavy economical cost.*

*Diagnosis of OA is beased on history and physical examination and radiographic features.*

*Plain radiograph is the principle technique used for diagnosis of OA.*

*The aim of this research was to evaluate the relationship between radiologic change and severity of symptoms in patient's suffering from OA and refer to BOALI Hospital in Ardebil city in 1383.*

***Method's and Materials:***

*This was a simple descriptive study with retrospective approach.*

*Data was gathered on statistically analyzed from 104 patients with diagnosis of OA in form of questionnaire that include all information about involved joint.*

*Physical symptoms and signs, radiologic findings, laboratory results, associated conditions and previous history of trauma.*

***Results:***

*The most common radiologic finding in patients with OA was related to joint space narrowing in 104 case and then marginal osteophytes in 65 (%46.4) respectively.*

103 numbers of patients (73.6%) was above 50 years old and the other was below 50 years old.

24 case (%17.1) was above 40 years.

Most common involved joint was knee joint with 99 patients involved (70.7%) and crepitation was most common physical sign with 42 patient's (30%).

**Conclusion:** There was meaningfull relationship between increasing age and narrowing joint space ( $P = 0.01$ ) so that perivalence was higher in older age.

**Key words:**

Osteoarthritis - Radiography - Physical signs.