

Index Name : Verbruggen index

Hand OA radiological index

Generalities :

Radiographs for hand OA could be either plain or digitalized images. Usually, antero-posterior views of both hands on the same film are used.

Target population :

Patients with digital hand osteoarthritis

Method of use :

Verbruggen proposed two scoring systems for progression of the disease. The thumb base joint is excluded from this system.

Anatomical lesion progression:

Osteophytes: Appearance +1; Disappearance -1; increased in size + 0.5; decrease in size – 0.5

Joint space: Narrowing +1; Widening -1

Subchondral cysts: Appearance +1; Disappearance -1; increased in size + 0.5; decrease in size – 0.5

Anatomical phase progression:

1. Normal joint “N”
2. Stationary Phase “S”: classical appearance of OA

3. Loss of joint space “J”: disappearance of the joint space
4. Erosive phase “ E”: concurrently or just after the J phase, erosion of the subchondral bone
5. Remodelling phase “R”: new irregular sclerotic subchondral plates. Huge osteophytes are formed during this phase.

References :

- 1) Verbruggen E, Goemaere S, Veys EM. Systems to assess the progression of finger joint osteoarthritis and the effects of disease modifying osteoarthritis drugs. Clin Rheumatol 2002; 21: 231-43.

Links:

<http://www.springerlink.com/content/kqg448h7u543g41d/>