THE EPIDEMIOLOGY OF OSTEOCHONDRITIS DISSECSANS IN ADULTS

Jennifer M. Weiss, MD1, Kevin G. Shea, MD2, John C. Jacobs Jr., BS3, Ian Becker, BS3, Mark Portman, BS4, Peter C. Cannamela, BS2, Jeffrey I. Kessler, MD1

1Kaiser Permanente Southern California, Los Angeles, California, USA
2St. Luke’s Sports Medicine, St. Luke’s Children’s Hospital, Boise, Idaho, USA
3University of Utah School of Medicine, Salt Lake City, Utah, USA
4Keck School of Medicine, University of Southern California, Los Angeles, California, USA

Background

• The epidemiology of pediatric OCD (osteoochondritis dissecans) has recently been elucidated in several studies. However, to date, few studies have been published on the epidemiology of OCD adult patients.

• The purpose of this study was to assess the epidemiology of OCD lesions in adults.

Methods

• A retrospective chart review was done on osteochondritis dissecans (OCD).

• All patients aged 20-45 from the entire database of patients enrolled as members of Kaiser Permanente Southern California from January 2011 until December 2013 were assessed.

• Inclusion criteria included OCD of any joint.

• Exclusion criteria included traumatic osteochondral fractures, co-existence of non-OCD intra-articular lesions.

• Joint involvement/location, laterality, and all patient demographics were recorded.

Results

• 124 OCD lesions were found.
  - 76 Ankle, 43 Knee, 3 Foot, 2 Elbow.

• 122 patients were identified.
  - 75 men (62%), 47 women (38%).

• 54 were white (44%), 43 Hispanic (35%), 14 African American (12%), 8 Asian (7%) and 3 “Other” (2%).

• Relative Risk:
  - Males at 2x the risk of Females (all OCD).
  - Whites at 2.3x the risk of Asians and 1.73x of Hispanics.
  - African Americans show (statistically non-significant) higher risk than Hispanics and Asians.
  - Males at 3.6x the risk of Females for Knee OCD.

Discussion

• The present study identifies the epidemiology of OCD in adults in a stable self-contained population of nearly 4 million patients in Southern California.

• The incidence of disease was lower than that seen in children and also lower than was seen in the original incidence study on OCD done by Linden et al.

• This study further confirms the higher risk and incidence of OCD of the knee in males, and decreasing frequency of OCD of the knee in older adults.

• Further studies regarding treatment outcomes of OCD in this adult population is warranted.

Conclusions

• This review of the epidemiology of OCD in adults is one of the largest to date.

• Similar to pediatric OCD, the majority of patients are males in knee OCD and all cases of OCD.

• Somewhat surprisingly, the majority of symptomatic lesions present in the ankle rather than the knee as we found in children.

• Whites and African Americans had the highest OR of OCD, and males had a significantly greater OR of LFC knee lesions as compared to females.


Questions? Contact Jennifer M. Weiss or Peter Cannamela at Jennifer.M.Weiss@kp.org or pcannamela@sandiego.edu

ROCK group website found at: www.kneeocd.org