

## ORAL CONTRACEPTIVE USE AND FRACTURE RISK-A RETROSPECTIVE STUDY OF 12,970 WOMEN IN THE UK

*Authors: Dombrowski S, Jacob L, Hadji P, Kostev K*

### INTRODUCTION

The aim of this analysis was to compare the risk of bone fracture in women using hormonal contraception with that in women who have never used hormonal contraception.

### METHODS

A total of 6485 women (mean age 37.8 years) with an initial diagnosis of fracture between January 2010 and December 2015 were identified in 135 doctors' offices in the UK Disease Analyzer database. In this nested case-control study, each case with a fracture was matched (1:1) to a control without a fracture for age, index year, and follow-up time. In total, 12,970 individuals were available for analysis. The main outcome of the study was the risk of fracture as a function of combined oral contraceptive (OC) therapy. Multivariate logistic regression models were used to determine the effect of OC therapy and its duration on the risk of fracture in the entire population and in four age-specific subgroups.

### RESULTS

Women without bone fractures were significantly more likely to have used oral contraception (OR 0.81). The usage of oral contraception was associated with a significantly lower risk of bone fracture (OR 0.81,

95% CI 0.74-0.90). This effect was strongest in the age groups 18-25 and 26-35 and in patients with an OC treatment duration of more than 1 year.

### CONCLUSIONS

The present study revealed that women without bone fractures were significantly more likely to have had exposure to combined oral contraception, especially where the duration of intake was at least 5 years.

Published in: *Osteoporos Int.* 2017 Aug;28(8):2349-2355. doi: 10.1007/s00198-017-4036-x. Epub 2017 Apr 13



If you would like to read any of the studies in its entirety, please, contact us to obtain the full version of a publication. Also, our research director is at your disposal if you have any further questions.

Thank you for your interest!