

The Consequences of Habitual Knuckle Cracking

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KEY POINTS FROM THIS ARTICLE:

- 1) "Habitual knuckle cracking in children has been considered a cause of arthritis."
- 2) Manipulating the metacarpal-phalangeal (MCP) joints to produce an audible popping or cracking sound is a "commonly observed childhood habit not infrequently persisting into adult life."
- 3) Knuckle cracking (KC) appears to cause some comfort or satisfaction to the person doing it; however, it has been claimed, "arthritis would be an inevitable outcome." [A claim this study shows to be false] "As a consequence, many children with this habit are chided to stop cracking their knuckles lest arthritis or enlarged knuckles or both develop."
- 4) Twenty-eight (average age 78.5 years) patients were examined clinically and by x-ray. Also, the incidence of KC in this geriatric population was compared with a group of 11-year-olds.
- 5) "Only one patient with a history of KC showed MCP degenerative joint disease [DJD] compared with 14 knuckle crackers who showed no changes."
- 6) "MCP osteophytes were observed in five patients who had no history of KC."

Elderly people (average 78.5 years) and knuckle cracking / osteoarthritis

	<u>Yes</u> Habitual Knuckle Cracking N= 15	<u>No</u> Habitual Knuckle Cracking N= 13
<u>Yes</u> Knuckle Osteoarthritis	1	5
<u>No</u> Knuckle Osteoarthritis	14	8
Percentage with Osteoarthritis	6.7%	38.5%

- 7) The prevalence of KC in the geriatric population is about the same as the prevalence in a youthful population.
- 8) Every patient with MCP DJD, whether or not they were knuckle crackers, also had radiographic evidence of distal hand DJD, suggesting that "MCP DJD is a function of whatever the predisposing factors are to osteoarthritis" and that "MCP DJD is not a consequence of knuckle cracking."
- 9) This survey of a "geriatric patient population with a history of knuckle cracking failed to show a correlation between knuckle cracking and degenerative changes of the metacarpal phalangeal joints."
- 10) "The data fail to support evidence that knuckle cracking leads to degenerative changes in the metacarpal phalangeal joints in old age."
- 11) "The chief morbid consequence of knuckle cracking would appear to be its annoying effect on the observer."

COMMENTS FROM DAN MURPHY:

This study concludes that habitual knuckle cracking does not increase the incidence of cracked knuckle osteoarthritis. I agree with this conclusion.

However, in reviewing the data, I believe their findings could have been stated differently:

1/15 knuckle crackers had knuckle DJD, = 6.7%

5/13 who did **NOT** crack their knuckles had knuckle DJD, = 38.5%

It appears to me that habitual knuckle cracking significantly reduces the incidence of knuckle DJD. [**by 82%**] $[(38.5 - 6.7)/38.5 = 82]$