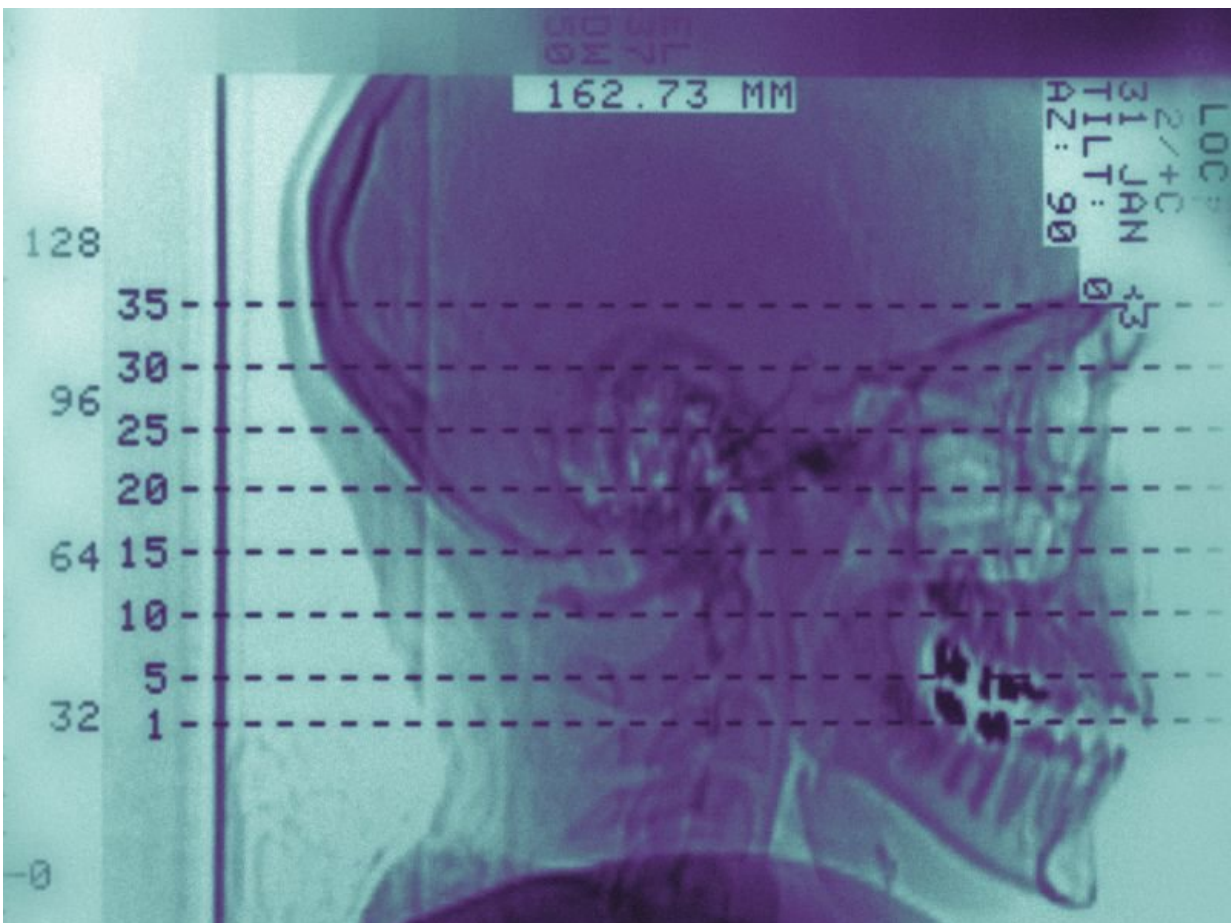


Obstructive sleep apnea linked to thinning of calvaria, skull base

May 4 2018



(HealthDay)—Obstructive sleep apnea (OSA) is associated with thinning

of the calvaria and skull base, according to a study published online May 3 in *JAMA Otolaryngology-Head & Neck Surgery*.

Cyrus Rabbani, M.D., from Indiana University School of Medicine in Indianapolis, and colleagues conducted a [retrospective cohort study](#) of 1,012 patients who underwent a polysomnogram and had high-resolution computed tomographic imaging of the head. Patients with and without OSA (56 and 58 patients, respectively) were matched for age and [body mass index](#).

The researchers found that patients with OSA had thinner mean calvaria (2.73 versus 2.47 mm; difference, -0.26 mm [95 percent confidence interval, -0.49 to -0.04]) and thinner skull bases (5.03 versus 4.32 mm; difference, -0.71 mm [95 percent confidence interval, -1.23 to -0.19]). The mean extracranial zygoma thickness was the same for those with and without OSA (4.92 versus 4.84 mm; difference, -0.07 mm; 95 percent confidence interval, -0.39 to 0.24). In nearly twice as many [patients](#) with versus without OSA, the tegmen mastoideum was dehiscence (37 versus 20 percent; difference, 17 percent; 95 percent [confidence interval](#), 0.4 to 32).

"OSA was independently associated with intracranial bone (calvaria and skull base) thinning and not with extracranial (zygoma) thinning," the authors write. "These findings support a possible role of OSA in the pathophysiologic development of spontaneous cerebrospinal fluid leaks."

More information: [Abstract/Full Text \(subscription or payment may be required\)](#)

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Citation: Obstructive sleep apnea linked to thinning of calvaria, skull base (2018, May 4)

retrieved 3 May 2024 from

<https://medicalxpress.com/news/2018-05-obstructive-apnea-linked-thinning-calvaria.html>

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