

# Emergency CT for head trauma may be overused, study shows

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Emergency patients are too often given head CT to check for skull fractures and brain hemorrhage, leading to unnecessary health care costs and patient exposure to radiation, according to a study to be presented at the ARRS 2018 Annual Meeting, set for April 22-27 in Washington, DC.

The study, to be presented by Michaela Cellina, of the Radiology Department of Fatebenefratelli-Sacco Hospital in Milan, Italy, evaluated [head](#) CT scans executed for minor head injury (MHI) in patients aged 18-45 who presented to the hospital's emergency department between January 1 and June 30, 2016. For each CT scan, researchers determined whether the CT referral met the criteria indicated by the National Institute for Health and Care Excellence (NICE) and the Canadian CT Head Rule (CCHR).

Of 492 cases reviewed, 260 (52.8%) and 376 (76.4%) of the CT examinations were not indicated according to the NICE and CCHR, respectively. Researchers noted no statistically significant difference between the specialty and seniority of the referring physician and over-referral, or between the patient's age and unwarranted CT studies. Motor vehicle accidents, however, were associated with a higher rate of non-indicated CT examinations for both NICE and CCHR, and two-wheel vehicle driver accidents were associated with a higher rate of appropriated CT exams for both NICE and CCHR. Only 15 of the 260 CT examinations were positive for [brain hemorrhage](#), subarachnoid hemorrhage, or skull fracture.

With educational activities representing the entire spectrum of radiology, ARRS will host leading radiologists from around the world at the ARRS 2018 Annual Meeting, April 22-27, at the Marriott Wardman Park Hotel in Washington, DC. For more information, <http://www.arrs.org/am18>.

Provided by American Roentgen Ray Society

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