

- CT scans had better validity than X-rays for detecting fracture in adults in high-risk and multi-injured blunt neck trauma.

CT scanning may be used, particularly to elucidate bony details, and MRI for delineation of soft tissue lesions. Be aware that a significant proportion of the normal population will show significant morphological changes on imaging that do not correlate with symptoms and do not have a causal relationship with the whiplash injury.^{5,6}

Kongsted and colleagues⁷ conducted a prospective trial on 178 patients with whiplash-associated disorders (WAD) and no fracture or dislocation as examined by X-ray. The participants received an MRI within 2 weeks of the MVA and again at 3 months. They were evaluated clinically initially and again at 3 and 12 months. MRI findings were found not to be predictive of clinical outcome and not correlated with pain or disability.

A review of the roles of CT and MRI in the evaluation of WAD and the safety issues of these techniques are reported by Bagley.⁸ This is a reasonable summary.

I hope this article has given you some helpful information on when to and when not to order imaging studies on a patient with whiplash. If you have suggestions for further articles please submit them to me at Laura.Jensen@ICBC.com.

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References

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Library resources: A focus on Down syndrome

Down syndrome, or trisomy 21, is a common congenital anomaly with an incidence rate of approximately 1 in 800 births across all ethnic groups. In dealing with the needs of patients and families facing this challenge, physicians will find the College library has a number of useful print and online resources. For example, Down syndrome results in an increased risk for several specific health conditions. The textbook *Management of Genetic Syndromes* (2005) provides a useful overview and may be borrowed from the library collection. Approximately 45% of children with Down syndrome will be

born with a heart abnormality, which can be corrected before their preschool years. See *Hurst's the Heart* (2008) and *Congenital Heart Disease in Children and Adolescents* in ACP PIER (2008) for details. Both of these texts are available for free online through the College library's web site, www.cpsbc.ca/library.

Children with Down syndrome have a 14-fold increase in the overall rate of acute lymphoblastic leukemia and experience Alzheimer disease three to five times more frequently than the general population. For more, see *Neoplastic Disease* in the online text *Current Diagnosis & Treatment*

Pediatrics (2009) or borrow *Adams and Victor's Principles of Neurology* (2005).

For practice guidelines and authoritative patient information, try the College library's search engine on the web site, or visit reliable sites like the Down Syndrome Research Foundation at www.dsrf.org. Remember that for high-quality clinical information to support patient care, the College library is only a phone call or e-mail away.

—Karen MacDonell
—Robert Melrose
—Judy Neill
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