

Spinal cancer: Guidelines for diagnosis unsupported in patients with lower back pain

February 27 2013

A new systematic review published in *The Cochrane Library* has raised doubts as to the effectiveness of "red flag" indicators at both identifying and excluding cancer in patients with lower back pain. The authors of the review concluded that most individual red flags were poor at diagnosing spinal malignancies and call for further studies focused on combinations of red flags.

[Lower back pain](#) is a common complaint, often with no obvious cause. In around 1-5% of [patients](#) with lower back pain, the condition results from a more serious underlying problem, such as a tumour. Guidelines for assessing patients with lower back pain recommend that doctors don't immediately start with imaging techniques such as X-ray and MRI. Instead, they are advised to perform a [physical examination](#) and look into their [medical history](#) looking for so-called red flag features that might point towards a more serious root cause. Identifying one or more of these features would indicate a need for further [diagnostic tests](#). In an ideal situation, those at a high risk of spinal malignancy would be identified by taking into consideration factors such as age and previous history of cancer, without carrying out unnecessary tests in large numbers of patients. In practice, however, there is little evidence that using these red flags accurately diagnoses spinal malignancies.

The researchers reviewed data from eight studies involving a total of 6,622 patients with lower back pain. These studies used 20 different red flags including a history of cancer, being over 50, no relief with [bed rest](#), unexplained weight loss and no improvement in symptoms after a

month. Although in some studies, having a history of cancer increased the likelihood of detecting spinal malignancy, other characteristics were of little use for diagnosing spinal malignancies. In addition, red flags were applied in large numbers of patients who showed no signs of spinal malignancy when imaging techniques were used.

"With the exception of having a previous history of cancer, most red flag characteristics on their own were poor at predicting spinal malignancy in patients with lower back pain," said lead researcher Nicholas Henschke of the Institute of Public Health at the University of Heidelberg in Heidelberg, Germany. "The use of these red flags as triggers for further investigations leads to unnecessary tests that can themselves be harmful."

Only seven out of the 20 red flags included in the review were evaluated in more than one study, highlighting the need for further research.

"Because spinal [malignancy](#) is rare, we will need to see very large studies to really understand whether these red flags are of use," said Henschke.

"In particular, we will need to see studies assessing combinations of different red flags. Our review focused on the diagnostic accuracy of individual red flags, whereas in practice it is more likely that several factors will be taken into consideration before a recommendation is made for further tests."

More information: Henschke N, Maher CG, Ostelo RWJG, de Vet HCW, Macaskill P, Irwig L. Red flags to screen for malignancy in patients with low-back pain. Cochrane Database of Systematic Reviews 2013, Issue 2. Art. No.: CD008686. [DOI: 10.1002/14651858.CD008686.pub2](#)

Provided by Wiley

Citation: Spinal cancer: Guidelines for diagnosis unsupported in patients with lower back pain (2013, February 27) retrieved 9 April 2024 from <https://medicalxpress.com/news/2013-02-spinal-cancer-guidelines-diagnosis-unsupported.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.