



The role of red flag symptoms in patients with acute low back pain in hospital settings

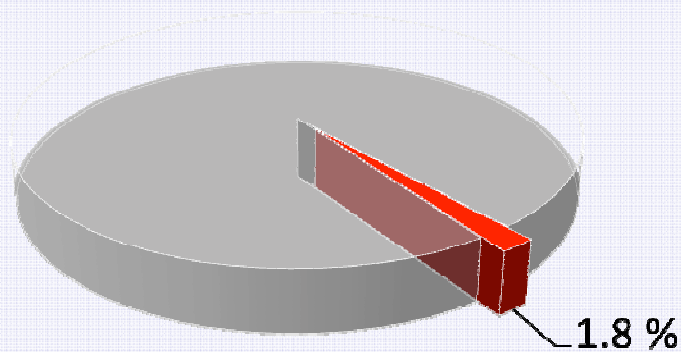
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Background and aims

- Red flags or warning signs in low back pain are factors which lead to arrange for more rapid investigation and treatment than would otherwise be necessary
- We compared patients symptoms and complaints with possible serious pathology, which display the red flag symptoms - correlation between the red flag symptoms and serious illness

Methodes

- We made an inception cohort of 2784 consecutive patients from Neurology department from primary care clinics in Riga, Latvia in period from October 2011 till January 2012
- Found 50 patients (1.8%) with acute low back pain and assessed a prevalence of “red flag” symptoms in serious pathology in patient with acute low back pain in hospital setting.

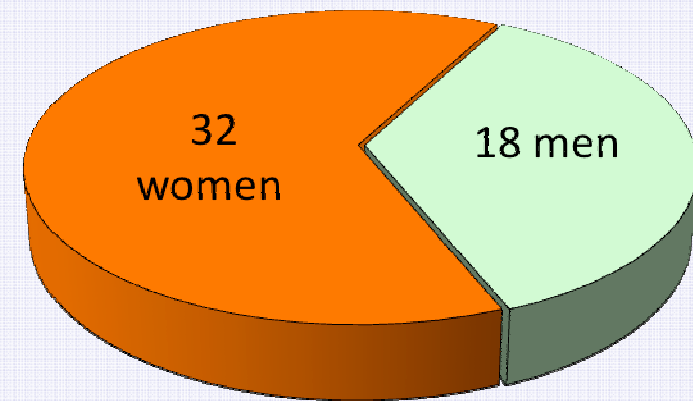


Patients with acute low back pain and red flag symptoms

The role of red flag symptoms in patients with acute low back pain in hospital settings

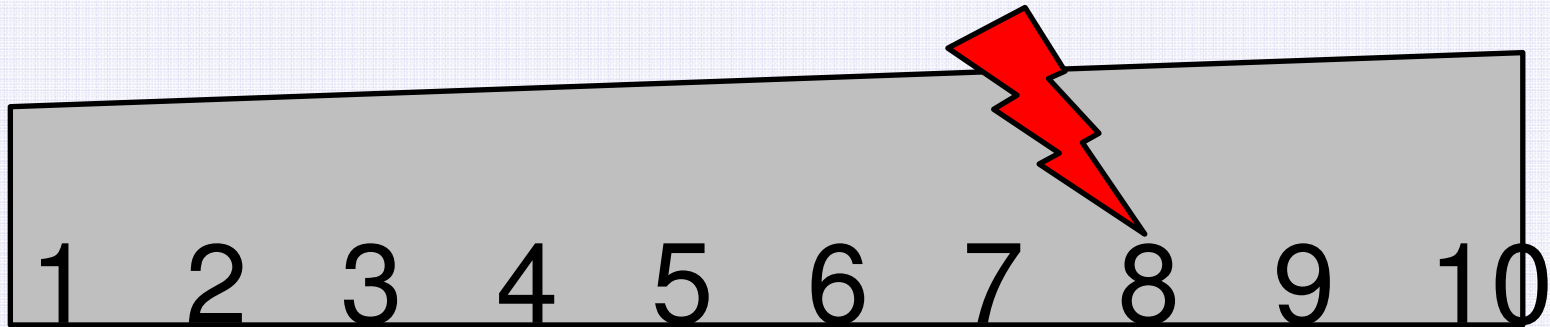
Results

- Identified 50 (18 men, 32 women, mean age 52 years) patients with low back pain
- We searched for 21 “red flag” symptoms that would signalize for serious pathology e.g. inflammation, fracture, referred pain (dissection of the abdominal aorta), infection and tumor.



- Vertebral pain accounted for almost **80%** of all the morphological forms.
- **Chronic process** (more than 6 months) was observed in **75%** of patients studied.
- More than half (**56%**) of patients with acute low back pain **were depressed** and **26%** had **psycho-emotional instability** associated with problems at home and at work.

The average level of pain on admission to 10-point scale score was **8**



The average Oswestry Disability index (ODI) was **66%**.

Conclusion

- Despite the low prevalence of serious pathology all patients had at least 1 red flag symptom. Only one case (0.5%) had severe pathology - spondylodiscitis.
- According to literary sources, the detection of serious diseases with the help of indicators was in the range 0.9%.
- Regarding this, it can be assumed that red flags have a high false-positive rate.

- We mean that the use of red flags in addition to appropriate history and physical examination of a patient during hospitalization is very important.
- This will enable in time and consistent application of such research methods as X rays, CT, MRI as well as involving the consultations of experts in different fields - neurosurgeons, angiosurgeons, rheumatologists, and others, which makes the primary examination of the patient more effective and allow time to determine the future treatment strategy.

- Along with the red flag a psycho-emotional state should be assessed, which will allow a more objective assessment of clinical symptoms and determine the treatment strategy.
- This explains the fact that patients in a state of psychological and emotional instability on admission had ODI > 75% and the intensity of pain 8 - 10.

Thank You