



The Royal College of  
**Chiropractors**

# Summary of the Possible Adverse Effects of Chiropractic Care

## INTRODUCTION

The Royal College of Chiropractors (RCC) has undertaken a review of the research literature on the safety and risk of manual treatment of the spine. The purpose was to help inform chiropractors about the evidence relating to relatively common and innocuous side-effects, and the rarely occurring but serious adverse events, that have been reported. The review aimed to objectively set out the available literature but did not assess the quality of evidence. A summary of the review's main findings, which chiropractors may find helpful when explaining the risks of treatment to patients, is given here.

## MILD OR MODERATE ADVERSE EFFECTS

Experiencing mild or moderate adverse effects (known as *benign* adverse events) is relatively common after chiropractic care, affecting 30-50% of patients. However, these effects are not unique to chiropractic care and may also be experienced at similar frequency with other forms of manual therapy, including that delivered by physiotherapists and osteopaths. Note that these effects:

- are short-lived (usually resolve within 24 hours);
- may include musculoskeletal pain, stiffness and/or headache;
- may also include dizziness, tiredness, feeling faint/lightheaded and/or tingling in the arms following neck treatment.

It is not clear from the literature whether particular manual techniques result in benign adverse events, although manipulation may carry a greater risk compared to mobilisation.

The evidence suggests that it is difficult to predict which patients are more likely to experience adverse events. Patients with higher levels of neck pain may have a greater chance of experiencing symptoms from the nerves in the arms (i.e. tingling or discomfort). However, although benign adverse events may be a problem for neck-pain patients in the short-term, they do not seem to affect results in the longer term.

## **SERIOUS ADVERSE EVENTS**

There are rare reported cases of serious spinal or neurological problems, as well as strokes, following chiropractic care. Because of their rarity, it is unclear what the level of risk is, but it has been estimated at between 1 in tens of thousands and 1 in millions of treatments. Since serious adverse events may result from pre-existing underlying conditions, screening for potential risk factors, signs or symptoms is a routine element of a visit to a chiropractor.

There appears to be an association between chiropractor visits and stroke associated with arteries in the neck. However, the level of risk appears to be similar to that for medical practitioner visits. This suggests the treatment may not be related to the stroke, but that the early symptoms of stroke, such as neck pain, led the patient to visit the practitioner. Thus, screening for known neck artery stroke risk factors, or signs or symptoms that there may be a problem, is routinely undertaken by chiropractors.

## **ADVERSE EVENTS IN CHILDREN**

Children may experience benign adverse events following chiropractic care. There are also reported cases of serious adverse events in children, although in some of these cases the child had pre-existing conditions. Again, chiropractors screen for any potential risk factors before treating children.

## **ADVERSE EVENTS IN ELDERLY PATIENTS**

There does not seem to be any greater risk for elderly patients with neuro-musculoskeletal problems visiting a chiropractor compared to visiting a medical practitioner. However, some underlying conditions may increase risk which is why chiropractors screen all elderly patients for relevant risk factors.

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