Mansfield, Smith, Spahr & Thacker (2020)

Background & Objective

Cervical spine radiculopathy (CSR) is a disabling condition which has significant negative impacts on a person's mental health, physical functioning and social participation. To date no systematic review has been completed investigating the prevalence or incidence of CSR, therefore our objective was to determine the incidence and/or prevalence of CSR in adults.

Design and Method

A systematic review was conducted including searches of PubMed (MEDLINE), EMBASE and CINAHL. Studies including data on incidence and/or prevalence of CSR were included.

Methodological quality was assessed using a modified Hayden, Cote and Bombardier (2006) appraisal checklist. Data was analysed narratively.

Results

Nine low to high-quality studies were included in the final review. Incidence ranged between 0.832 to 1.79 per 1000 person-years from two high quality and one low quality study. Prevalence values ranged from 1.21 to 5.8 per 1000 from four medium to high quality studies. Prevalence values of 1.14% (95% CI 0.45-1.82) and 1.31% (95% CI 0.66-1.96) for males and females respectively were reported from one medium quality study. One medium quality study reported an unadjusted prevalence value of 6.3% for males and females.

Conclusions

This is the first systematic review investigating the epidemiology of CSR in an adult population.

This review reports a variable incidence rate and prevalence of CSR among specific populations, however, this was based on nine studies. Investigating CSR epidemiology across other populations globally and standardising CSR diagnostic criteria is a priority.