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Introduction

Cervical spine radiculopathy (CSR) is a disabling condition which has significant negative impacts on a person's mental health, physical functioning and social participation.

CSR is a complex presentation, associated with increased dependence on healthcare systems. Research has reported variable CSR incidence and prevalence rates among different populations.

To date no systematic review has been undertaken to determine the incidence or prevalence of CSR.

Objective

- ✓ To determine the incidence and/or prevalence of CSR in adults.
- ✓ PROSPERO Registration: CRD42019138903.

Design

- ✓ A systematic review was conducted, following PRISMA guidelines, including searches of PubMed (MEDLINE), EMBASE and CINAHL from inception to 20th February 2020.
- ✓ 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.

Cervical spine radiculopathy has variable prevalence and incidence rates

Prevalence:

1.1%-6.3%

Incidence:

0.832 to 1.79 per 1000 person-years

Results

- ✓ 3,898 studies were identified and screened. Nine low to high-quality studies were included in the final review (n=28,897 confirmed CSR cases).
- ✓ Incidence rates of CSR ranged from 0.832 to 1.79 per 1000 person-years (combined male and female data) from six studies (n= 25,726 confirmed CSR cases).
- ✓ Prevalence rates ranged from 1.1% to 6.3% from three studies (n= 3,171 confirmed CSR cases).
- ✓ There is limited consistency showing males are more likely to experience CSR compared to females.

Conclusions

- ✓ This is the first systematic review investigating the epidemiology of CSR in an adult population.
- ✓ This review reports a variable high incidence rate of CSR among specific populations, however, this was only based on nine studies. There was inconsistent CSR diagnostic criteria employed across the included studies.
- ✓ There is a priority to investigate CSR epidemiology across other populations globally and standardising CSR diagnostic criteria.