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- 
- [Resources](#)
 - [All Resources](#)
 - [Literature](#)
 - [Bookshelf](#)
 - [Journals Database](#)
 - [MeSH Database](#)
 - [PubMed](#)
 - [PubMed Central](#)
 - [All Literature Resources...](#)
 - [DNA & RNA](#)
 - [BankIt](#)
 - [BLAST](#)
 - [BLAST \(Stand-alone\)](#)
 - [GenBank](#)
 - [Genome Workbench](#)
 - [Influenza Virus](#)
 - [Nucleotide Database](#)
 - [PopSet](#)
 - [Reference Sequence \(RefSeq\)](#)
 - [Sequence Read Archive \(SRA\)](#)
 - [Trace Archive](#)
 - [All DNA & RNA Resources...](#)
 - [Proteins](#)
 - [BLAST](#)
 - [BLAST \(Stand-alone\)](#)
 - [BLAST Link \(BLink\)](#)
 - [CD-Search](#)
 - [GenBank](#)
 - [ProSplign](#)
 - [Protein](#)
 - [Protein Clusters](#)
 - [Reference Sequence \(RefSeq\)](#)
 - [All Proteins Resources...](#)
 - [Sequence Analysis](#)
 - [BLAST](#)
 - [BLAST \(Stand-alone\)](#)
 - [BLAST Link \(BLink\)](#)
 - [GenBank](#)
 - [Genome Workbench](#)
 - [Influenza Virus](#)
 - [Primer-BLAST](#)
 - [ProSplign](#)
 - [Splign](#)
 - [All Sequence Analysis Resources...](#)
 - [Genes & Expression](#)

- [GenBank](#)
- [Gene](#)
- [Gene Expression Omnibus \(GEO\) Datasets](#)
- [Gene Expression Omnibus \(GEO\) Profiles](#)
- [Genome Workbench](#)
- [HomoloGene](#)
- [Map Viewer](#)
- [Online Mendelian Inheritance in Man \(OMIM\)](#)
- [UniGene](#)
- [All Genes & Expression Resources...](#)
- [Genomes & Maps](#)
 - [Database of Genomic Structural Variation \(dbVar\)](#)
 - [Genome](#)
 - [Genome Project](#)
 - [Genome Workbench](#)
 - [Influenza Virus](#)
 - [Map Viewer](#)
 - [Nucleotide Database](#)
 - [PopSet](#)
 - [ProSplign](#)
 - [Sequence Read Archive \(SRA\)](#)
 - [Splign](#)
 - [Trace Archive](#)
 - [UniSTS](#)
 - [All Genomes & Maps Resources...](#)
- [Domains & Structures](#)
 - [Cn3D](#)
 - [Conserved Domain Database \(CDD\)](#)
 - [CD-Search](#)
 - [Structure \(Molecular Modeling Database\)](#)
 - [Vector Alignment Search Tool \(VAST\)](#)
 - [All Domains & Structures Resources...](#)
- [Genetics & Medicine](#)
 - [Bookshelf](#)
 - [Database of Genotypes and Phenotypes \(dbGaP\)](#)
 - [Influenza Virus](#)
 - [Map Viewer](#)
 - [Online Mendelian Inheritance in Man \(OMIM\)](#)
 - [PubMed](#)
 - [PubMed Central](#)
 - [All Genetics & Medicine Resources...](#)
- [Taxonomy](#)
 - [Taxonomy](#)
 - [Taxonomy Browser](#)
 - [Taxonomy Common Tree](#)
 - [All Taxonomy Resources...](#)
- [Data & Software](#)
 - [Cn3D](#)
 - [ProSplign](#)

- [Splign](#)
 - [All Data & Software Resources...](#)
- [Training & Tutorials](#)
 - [NCBI Education Page](#)
 - [NCBI Handbook](#)
 - [NCBI Help Manual](#)
 - [Science Primer](#)
 - [All Training & Tutorials Resources...](#)
- [Homology](#)
 - [BLAST](#)
 - [BLAST \(Stand-alone\)](#)
 - [Conserved Domain Database \(CDD\)](#)
 - [Genome ProtMap](#)
 - [HomoloGene](#)
 - [Protein Clusters](#)
 - [All Homology Resources...](#)
- [Small Molecules](#)
 - [PubChem BioAssay](#)
 - [PubChem Compound](#)
 - [PubChem Structure Search](#)
 - [PubChem Substance](#)
 - [All Small Molecules Resources...](#)
- [Variation](#)
 - [Database of Genomic Structural Variation \(dbVar\)](#)
 - [Database of Genotypes and Phenotypes \(dbGaP\)](#)
 - [Database of Single Nucleotide Polymorphisms \(dbSNP\)](#)
 - [SNP Submission Tool](#)
 - [All Variation Resources...](#)
- [How To](#)
 - [All How To](#)
 - [Literature](#)
 - [DNA & RNA](#)
 - [Proteins](#)
 - [Sequence Analysis](#)
 - [Genes & Expression](#)
 - [Genomes & Maps](#)
 - [Domains & Structures](#)
 - [Genetics & Medicine](#)
 - [Taxonomy](#)
 - [Data & Software](#)
 - [Training & Tutorials](#)
 - [Homology](#)
 - [Small Molecules](#)
 - [Variation](#)
- [Skip to main content](#)
- [Skip to navigation](#)
- [About NCBI Accesskeys](#)

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- [Limits](#)
- [Advanced search](#)
- [Help](#)

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- Number of items displayed:
- Feed name:

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- Summary
- Summary (text)
- Abstract
- Abstract (text)
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An epidemiologic study of the relationship between postural asymmetry in the teen years and subsequent back and neck pain.

[Dieck GS](#), [Kelsey JL](#), [Goel VK](#), [Panjabi MM](#), [Walter SD](#), [Laprade MH](#).

Abstract

This epidemiologic study examined the relationship between postural discrepancies in the posterior plane and the subsequent development of back and neck pain. The study population comprised women who were members of the graduating classes of 1957, 1958, and 1959 of an eastern U.S. women's college. Information on postural asymmetry was gathered from two sources: (1) measurements made from posture pictures taken early in the freshman year of college and obtained from each woman in the study, and (2) subjective evaluations made by the physical education department faculty at the time of examination. Information on the development of back and neck disorders and associated risk factors during the subsequent 25 years was obtained by a postal questionnaire. Three parameters of postural asymmetry were examined from the posture picture measurements: elevation of one shoulder, elevation of one hip, and deviation of the spine from the midline of the body. None of these parameters nor the physical education department evaluations was associated with a subsequent report of low-back pain, mid-back pain, or neck pain.

PMID: 2938272 [PubMed - indexed for MEDLINE]

Publication Types, MeSH Terms, Grant Support

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Salminen JJ. Acta Paediatr Scand Suppl. 1984; 315:1-122.
- [Back posture education in elementary schoolchildren: a 2-year follow-up study.](#) [Eur Spine J. 2007]
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Geldhof E, Cardon G, De Bourdeaudhuij I, De Clercq D. Eur Spine J. 2007 Jun; 16(6):841-50. Epub 2006 Sep 30.
- [Determinants of self-reported neck-shoulder and low back symptoms in a general population.](#) [Spine (Phila Pa 1976). 1998]
Determinants of self-reported neck-shoulder and low back symptoms in a general population.
Barnekow-Bergkvist M, Hedberg GE, Janlert U, Jansson E. Spine (Phila Pa 1976). 1998 Jan 15; 23(2):235-43.
- [Review \[Backpack and spinal disease: myth or reality?\]](#) [Rev Chir Orthop Reparatrice Appar Mot. 2004...]
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Cottalorda J, Bourelle S, Gautheron V, Kohler R. Rev Chir Orthop Reparatrice Appar Mot. 2004 May; 90(3):207-14.
- [Review Thoracic spine pain in the general population: prevalence, incidence and associated factors in children, adolescents and adults. A systematic review.](#) [BMC Musculoskelet Disord. 2009]
Review Thoracic spine pain in the general population: prevalence, incidence and associated factors in children, adolescents and adults. A systematic review.
Briggs AM, Smith AJ, Straker LM, Bragge P. BMC Musculoskelet Disord. 2009 Jun 29; 10:77. Epub 2009 Jun 29.

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- **Getting Started**

- [NCBI Help Manual](#)
- [NCBI Handbook](#)
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- **Resources**

- [Literature](#)
- [DNA & RNA](#)
- [Proteins](#)
- [Sequence Analysis](#)
- [Genes & Expression](#)
- [Genomes & Maps](#)
- [Domains & Structures](#)
- [Genetics & Medicine](#)
- [Taxonomy](#)
- [Data & Software](#)
- [Training & Tutorials](#)
- [Homology](#)
- [Small Molecules](#)
- [Variation](#)

- **Popular**

- [PubMed](#)
- [Nucleotide](#)
- [BLAST](#)
- [PubMed Central](#)
- [Gene](#)
- [Bookshelf](#)
- [Protein](#)
- [OMIM](#)
- [Genome](#)
- [SNP](#)
- [Structure](#)

- **Featured**

- [GenBank](#)
- [Reference Sequences](#)
- [Map Viewer](#)
- [Genome Projects](#)
- [Human Genome](#)
- [Mouse Genome](#)
- [Influenza Virus](#)
- [Primer-BLAST](#)
- [Sequence Read Archive](#)

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