

## Cardiovascular features in adolescents and adults with sickle cell anaemia (1993-05)

- [NCBI](#)
- [Skip to main content](#)
- [Skip to navigation](#)
- [Resources](#)
  - [All Resources](#)
  - [Chemicals & Bioassays](#)
    - [BioSystems](#)
    - [PubChem BioAssay](#)
    - [PubChem Compound](#)
    - [PubChem Structure Search](#)
    - [PubChem Substance](#)
    - [All Chemicals & Bioassays Resources...](#)
  - [DNA & RNA](#)
    - [BLAST \(Basic Local Alignment Search Tool\)](#)
    - [BLAST \(Stand-alone\)](#)
    - [E-Utilities](#)
    - [GenBank](#)
    - [GenBank: BankIt](#)
    - [GenBank: Sequin](#)
    - [GenBank: tbl2asn](#)
    - [Genome Workbench](#)
    - [Influenza Virus](#)
    - [Nucleotide Database](#)
    - [PopSet](#)
    - [Primer-BLAST](#)
    - [ProSplign](#)
    - [Reference Sequence \(RefSeq\)](#)
    - [RefSeqGene](#)
    - [Sequence Read Archive \(SRA\)](#)
    - [Splign](#)
    - [Trace Archive](#)
    - [UniGene](#)
    - [UniSTS](#)
    - [All DNA & RNA Resources...](#)
  - [Data & Software](#)
    - [BLAST \(Basic Local Alignment Search Tool\)](#)
    - [BLAST \(Stand-alone\)](#)
    - [Cn3D](#)

- [Conserved Domain Search Service \(CD Search\)](#)
- [E-Utilities](#)
- [GenBank: BankIt](#)
- [GenBank: Sequin](#)
- [GenBank: tbl2asn](#)
- [Genome ProtMap](#)
- [Genome Workbench](#)
- [Primer-BLAST](#)
- [ProSplign](#)
- [PubChem Structure Search](#)
- [SNP Submission Tool](#)
- [Splign](#)
- [Vector Alignment Search Tool \(VAST\)](#)
- [All Data & Software Resources...](#)
- [Domains & Structures](#)
  - [BioSystems](#)
  - [Cn3D](#)
  - [Conserved Domain Database \(CDD\)](#)
  - [Conserved Domain Search Service \(CD Search\)](#)
  - [Structure \(Molecular Modeling Database\)](#)
  - [Vector Alignment Search Tool \(VAST\)](#)
  - [All Domains & Structures Resources...](#)
- [Genes & Expression](#)
  - [BioSystems](#)
  - [Database of Genotypes and Phenotypes \(dbGaP\)](#)
  - [E-Utilities](#)
  - [Gene](#)
  - [Gene Expression Omnibus \(GEO\) Database](#)
  - [Gene Expression Omnibus \(GEO\) Datasets](#)
  - [Gene Expression Omnibus \(GEO\) Profiles](#)
  - [Genome Workbench](#)
  - [HomoloGene](#)
  - [Map Viewer](#)
  - [Online Mendelian Inheritance in Man \(OMIM\)](#)
  - [RefSeqGene](#)
  - [UniGene](#)
  - [All Genes & Expression Resources...](#)
- [Genetics & Medicine](#)
  - [Bookshelf](#)
  - [Database of Genotypes and Phenotypes \(dbGaP\)](#)
  - [Genetic Testing Registry](#)

- [Influenza Virus](#)
- [Map Viewer](#)
- [Online Mendelian Inheritance in Man \(OMIM\)](#)
- [PubMed](#)
- [PubMed Central \(PMC\)](#)
- [PubMed Clinical Queries](#)
- [RefSeqGene](#)
- [All Genetics & Medicine Resources...](#)
- [Genomes & Maps](#)
  - [Database of Genomic Structural Variation \(dbVar\)](#)
  - [GenBank: tbl2asn](#)
  - [Genome](#)
  - [Genome Project](#)
  - [Genome ProtMap](#)
  - [Genome Workbench](#)
  - [Influenza Virus](#)
  - [Map Viewer](#)
  - [Nucleotide Database](#)
  - [PopSet](#)
  - [ProSplign](#)
  - [Sequence Read Archive \(SRA\)](#)
  - [Splign](#)
  - [Trace Archive](#)
  - [UniSTS](#)
  - [All Genomes & Maps Resources...](#)
- [Homology](#)
  - [BLAST \(Basic Local Alignment Search Tool\)](#)
  - [BLAST \(Stand-alone\)](#)
  - [BLAST Link \(BLink\)](#)
  - [Conserved Domain Database \(CDD\)](#)
  - [Conserved Domain Search Service \(CD Search\)](#)
  - [Genome ProtMap](#)
  - [HomoloGene](#)
  - [Protein Clusters](#)
  - [All Homology Resources...](#)
- [Literature](#)
  - [Bookshelf](#)
  - [E-Utilities](#)
  - [Journals in NCBI Databases](#)
  - [MeSH Database](#)
  - [NCBI Handbook](#)

- [NCBI Help Manual](#)
- [NCBI News](#)
- [PubMed](#)
- [PubMed Central \(PMC\)](#)
- [PubMed Clinical Queries](#)
- [PubMed Health](#)
- [All Literature Resources...](#)
- [Proteins](#)
  - [BioSystems](#)
  - [BLAST \(Basic Local Alignment Search Tool\)](#)
  - [BLAST \(Stand-alone\)](#)
  - [BLAST Link \(BLink\)](#)
  - [Conserved Domain Database \(CDD\)](#)
  - [Conserved Domain Search Service \(CD Search\)](#)
  - [E-Utilities](#)
  - [ProSplign](#)
  - [Protein Clusters](#)
  - [Protein Database](#)
  - [Reference Sequence \(RefSeq\)](#)
  - [All Proteins Resources...](#)
- [Sequence Analysis](#)
  - [BLAST \(Basic Local Alignment Search Tool\)](#)
  - [BLAST \(Stand-alone\)](#)
  - [BLAST Link \(BLink\)](#)
  - [Conserved Domain Search Service \(CD Search\)](#)
  - [Genome ProtMap](#)
  - [Genome Workbench](#)
  - [Influenza Virus](#)
  - [Primer-BLAST](#)
  - [ProSplign](#)
  - [Splign](#)
  - [All Sequence Analysis Resources...](#)
- [Taxonomy](#)
  - [Taxonomy](#)
  - [Taxonomy Browser](#)
  - [Taxonomy Common Tree](#)
  - [All Taxonomy Resources...](#)
- [Training & Tutorials](#)
  - [NCBI Education Page](#)
  - [NCBI Handbook](#)
  - [NCBI Help Manual](#)

- [NCBI News](#)
- [Science Primer](#)
- [All Training & Tutorials 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](#)
  - [Chemicals & Bioassays](#)
  - [DNA & RNA](#)
  - [Data & Software](#)
  - [Domains & Structures](#)
  - [Genes & Expression](#)
  - [Genetics & Medicine](#)
  - [Genomes & Maps](#)
  - [Homology](#)
  - [Literature](#)
  - [Proteins](#)
  - [Sequence Analysis](#)
  - [Taxonomy](#)
  - [Training & Tutorials](#)
  - [Variation](#)
- [About NCBI Accesskeys](#)

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- [Advanced](#)
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### Display Settings:

- [Abstract](#)

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- Summary (text)
- Abstract
- Abstract (text)
- MEDLINE
- XML
- PMID List

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- Order
- My Bibliography
- Citation manager

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## **Cardiovascular features in adolescents and adults with sickle cell anaemia.**

[Ayuo PO](#), [Abinya NA](#), [Joshi MD](#), [Lore W](#).

## Source

Department of Medicine, Faculty of Health Sciences, Moi University, Eldoret, Kenya.

## Abstract

Fifty five sickle cell anaemia (SCA) patients at the Kenyatta National Hospital were studied with a view to elucidating their cardiovascular status. Their age range was 13 to 27 years (median 18.9 years). They comprised 27 males and 28 females and their mean haemoglobin concentration was 8.5 +/- 1.4 g/dl. Haemoglobin level of 8.0-9.9 g/dl seen in 30 patients was noted to confer the lowest incidence of exertional dyspnoea and palpitation. Similarly, patients with this haemoglobin level had the lowest mean heart rate. The mean blood pressure was 114.9 +/- 9.9 mmHg systolic and 64.6 +/- 10 mmHg diastolic. Blood pressures, ejection fraction (EF) and differential fibre shortening (%D) were found to be directly related to haemoglobin level, whereas cardio-thoracic index (CTI) and left ventricular dimensions were inversely related to haemoglobin level. Mean echocardiographic measurements were within normal limits and left ventricular functions were found to be normal in 80.9% of the patients indicating that the majority of SCA patients at the Kenyatta National Hospital have good cardiac function.

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- [Adolescent](#)
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- [Hemoglobins/analysis](#)
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- [Sex Distribution](#)
- [Ventricular Function, Left](#)

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- **Getting Started**
- [NCBI Education](#)
- [NCBI Help Manual](#)
- [NCBI Handbook](#)
- [Training & Tutorials](#)
  
- **Resources**
- [Chemicals & Bioassays](#)
- [Data & Software](#)
- [DNA & RNA](#)
- [Domains & Structures](#)
- [Genes & Expression](#)
- [Genetics & Medicine](#)
- [Genomes & Maps](#)
- [Homology](#)
- [Literature](#)
- [Proteins](#)
- [Sequence Analysis](#)
- [Taxonomy](#)
- [Training & Tutorials](#)
- [Variation](#)

- **Popular**
- [PubMed](#)
- [Nucleotide](#)
- [BLAST](#)
- [PubMed Central](#)
- [Gene](#)
- [Bookshelf](#)
- [Protein](#)
- [OMIM](#)
- [Genome](#)
- [SNP](#)
- [Structure](#)
  
- **Featured**
- [Genetic Testing Registry](#)
- [PubMed Health](#)
- [GenBank](#)
- [Reference Sequences](#)
- [Map Viewer](#)
- [Human Genome](#)
- [Mouse Genome](#)
- [Influenza Virus](#)
- [Primer-BLAST](#)
- [Sequence Read Archive](#)
  
- **NCBI Information**
- [About NCBI](#)
- [Research at NCBI](#)
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