

Abstract

Purpose:

The purpose of this study was to have an accurate estimate about the sexual function of sickle cell disease adult men with previous history of recurrent attacks of ischemic priapism in childhood. We assessed the studies for their precise documentation for the erectile function in this group of patients.

Materials and methods:

We performed a systematic review of the literature by querying PubMed, Medline, and Cochrane. We included original studies on adult patients with sickle cell disease and history of ischemic priapism.

Results:

We identified 15,057 publications, of which 10 met the study inclusion criteria. The incidence of erectile dysfunction was reported up to 69.20% in one study.

Conclusion:

More extended prospective studies are required as multicenter studies to find the exact incidence of erectile dysfunction in men with sickle cell disease and priapism.

Level of evidence:

Level of evidence is not applicable for this systematic review.



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References

1. Gregory A, Broderick M. "Priapism." In: *Campbell-Walsh urology*. 10th ed. PA, USA: Elsevier; 2012, pp.749–769.

[Google Scholar](#)

2. Montague DK, Jarrow JM, Broderick GA, et al. Guidelines on the management of priapism. *J Urol* 2003;170: 1318–1324.

[Crossref](#)

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[Google Scholar](#)

3. Bivalacqua TJ, Musicki B, Kutlu O, et al. New insights into the pathophysiology of sickle cell disease-associated priapism. *J Sex Med* 2012; 9: 79–87.

[Crossref](#)

[PubMed](#)

[ISI](#)

[Google Scholar](#)

4. Broderick GA. Priapism and sickle-cell anaemia: Diagnosis and nonsurgical therapy. *J Sex Med* 2012; 9: 88–103.

[Crossref](#)



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5. Adeyoku AB, Olujohungbe AB, Morris J, et al. Priapism in sickle-cell disease: Incidence, risk factors and complications – an international multicentre study. *BJU Int* 2002; 90: 898–902.

[Crossref](#)

[PubMed](#)

[ISI](#)

[Google Scholar](#)

6. Nolan VG, Wyszynski DF, Farrer LA, et al. Haemolysis-associated priapism in sickle cell disease. *Blood* 2005; 106: 3264–3267.

[Crossref](#)

[PubMed](#)

[ISI](#)

[Google Scholar](#)

7. Anele UA, Burnett AL. Erectile dysfunction after sickle cell disease - associated recurrent ischemic priapism: profile and risk factors. *J Sex Med* 2015; 12(3): 713–719.

[Crossref](#)

[PubMed](#)

[Google Scholar](#)



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8. Ahmed M, Augustine B, Matthew M, et al. Prognostic factors and outcome of management of ischemic priapism in Zaria, Nigeria. *Niger J Surg* 2017; 23(1): 15–19.

[Crossref](#)

[PubMed](#)

[Google Scholar](#)

9. Fall B, Fall PA, Diao P, et al. Acute Priapism associated with sickle cell disease in senegal: clinical, therapeutic features and risk factors for erectile dysfunction. *Med Trop (Mars)* 2010; 70(5-6): 475–478.

[PubMed](#)

[Google Scholar](#)

10. Ugwumba FO, Ekwedigwe HC, Echetaba KN. Ischemic priapism in South – East Nigeria: presentation, management challenges, and aftermath issues. *Niger J Clin Pract* 2016; 19(2): 207–211.

[Crossref](#)

[PubMed](#)

[Google Scholar](#)

11. Addis G, Spector R, Shaw E, et al. The physical, social and psychological impact of priapism on adult males with sickle cell disorder. *Chronic Ill* 2007; 3(2): 145–154.

[Crossref](#)

[PubMed](#)

[Google Scholar](#)

12. Ekeke ON, Omunakwe HE, Eke N. Management of priapism in adult men. *Int Surg* 2015; 100(3): 552–557.

[Crossref](#)



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[PubMed](#)

[Google Scholar](#)

13. Burnett AL, Allen RR, Tempany CM, et al. Evaluation of erectile function in men with sickle cell disease. *Urology* 1995; 45(4): 657–663.

[Crossref](#)

[PubMed](#)

[Google Scholar](#)

14. Bertram RA, Carson CC, Webster GD. Implantation of penile prostheses in patients impotent after priapism. *Urology* 1985; 26(4): 325–327.

[Crossref](#)

[PubMed](#)

[Google Scholar](#)

15. Bennett N, Mulhall J. Sickle cell disease status and outcomes of African-American men presenting with priapism. *J Sex Med* 2008; 5: 1244–1250.

[Crossref](#)

[PubMed](#)

[ISI](#)

[Google Scholar](#)

16. Montague DK, Jarow J, Broderick GA, et al. American Urological Association guidelines on the management of priapism. Members of the Erectile Dysfunction Guideline Update Panel, American Urological Association. *J Urol* 2003; 170: 1318–1324.

[Crossref](#)



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[Google Scholar](#)

17. Zacharakis E, Garaffa G, Raheem AA, et al. Penile prosthesis insertion in patients with refractory ischaemic priapism: early vs delayed implantation. *BJU Int* 2014; 114: 576–581.

[Crossref](#)

[PubMed](#)

[ISI](#)

[Google Scholar](#)

18. Kadhim KA, Baldawi KH, Lami F. Epidemiological profile of sickle cell disease-Iraq. *J Prev Med (Wilmington)* 2015; 3: 78.

[Google Scholar](#)

19. Broderick GA, Kadioglu A, Bivalacqua TJ, et al. Priapism: Pathogenesis, epidemiology, and management. *J Sex Med* 2010; 7: 476–500.

[Crossref](#)

[PubMed](#)

[ISI](#)

[Google Scholar](#)

20. Rosen RC, Cappelleri JC, Smith MD, et al. Development and evaluation of an abridged, 5-item version of the International Index of Erectile Function (IIEF-5) as a diagnostic tool for erectile dysfunction. *Int J Impot Res* 1999; 11: 319–326.

[Crossref](#)



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[PubMed](#)[ISI](#)[Google Scholar](#)

21. Reddy AG, et al. Role of penile prosthesis in priapism: A review. *World J Mens Health* 2018; 36: 4–14.

[Crossref](#)[PubMed](#)[Google Scholar](#)

22. Yücel ÖB, Pazır Y, Kadioğlu A. Penile prosthesis implantation in priapism. *Sex Med Rev* 2018; 6: 310–318.

[Crossref](#)[PubMed](#)[Google Scholar](#)

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