Acknowledgements

The authors thank Mr. C.W.P. Reynolds for his careful linguistic help with this manuscript. The authors declare no competing financial interests.

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Authors' contributions

TM drafted the manuscript and participated in its design. SF, RO, and TI participated in drafting of the manuscript and participated in its design. YI participated in the drafting of the manuscript and supplied the pathological image used for the manuscript. SY conceived of the case report, participated in drafting the manuscript and gave final approval for the version to be submitted for publication.

Competing interests

The authors declare that they have no competing interests.

Received: 5 March 2009 Accepted: 4 February 2010 Published: 4 February 2010

- Cassidy JT, Lindsley CB: Juvenile Dermatomyositis. Textbook of Pediatric Rheumatology Philadelphia: Elsevier SaunderCassidy JT, Petty RE , 5 2005,
- Huber AM, Lang B, LeBlanc CM, Birdi N, Bolaria RK, Malleson P, MacNeil I, Momy JA, Avery G, Feldman BM: Medium- and long-term functional outcomes in a multicenter cohort of children with juvenile dermatomyositis. Arthritis Rheum 2000, 43:541-9.
- Fisler RE, Liang MG, Fuhlbrigge RC, Yalcindag A, Sundel RP: Aggressive management of juvenile dermatomyositis results in improved outcome and decreased incidence of calcinosis. J Am Acad Dermatol 2002, 47:505-11
- Mukamel M, Horev G, Mimouni M: New insight into calcinosis of juvenile dermatomyositis: a study of composition and treatment. J Pediatr 2001,
- Pachman LM, Liotta-Davis MR, Hong DK, Kinsella TR, Mendez EP, Kinder JM, Chen EH: TNFalpha-308A allele in juvenile dermatomyositis: association with increased production of tumor necrosis factor alpha, disease duration, and pathologic calcifications. Arthritis Rheum 2000, 43:2368-77.
- Pachman LM, Abbott K, Sinacore JM, Amoruso L, Dyer A, Lipton R, llowite N, Hom C, Cawkwell G, White A, Rivas-Chacon R, Kimura Y, Rav L. Ramsey-Goldman R: Duration of illness is an important variable for untreated children with juvenile dermatomyositis. J Pediatr 2006, 148:247-53.
- Riley P, MacCann LJ, Maillard SM, Woo P, Murray KJ, Pilkington CA: Effectiveness of infliximab in the treatment of refractory juvenile dermatomyositis with calcinosis. Rheumatology 2008, 47:877-80.
- Yasui K, Uchida N, Akazawa Y, Nakamura S, Minami I, Amano Y, Yamazaki T: Thalidomide for treatment of intestinal involvement of juvenile-onset Behçet disease. Inflamm Bowel Dis 2008, 14:396-400.
- García-Carrasco M, Fuentes-Alexandro S, Escárcega RO, Rojas-Rodriguez J, Escobar LE: Efficacy of thalidomide in systemic onset juvenile rheumatoid arthritis. Joint Bone Spine 2007, 74:500-3.
- Rowland TL, McHugh SM, Deighton J, Dearman RJ, Ewan PW, Kimber I: Differential regulation by thalidomide and dexamethasone of cytokine expression in human peripheral blood mononuclear cells. Immunopharmacology 1998, 40:11-20.
- 11. Calabrese L, Fleischer AB: Thalidomide: current and potential clinical applications. Am J Med 2000, 108:487-95
- Pachman LM, Veis A, Stock S, Abbott K, Vicari F, Patel P, Giczewski D, Webb C, Spevak L, Boskey AL: Composition of Calcifications in children with juvenile dermatomyositis association with chronic cutaneous inflammation. Arthritis Rheum 2006, 54:3345-3350.
- Sampaio EP, Sarno EN, Galilly R, Cohn ZA, Kaplan G: Thalidomide selectively inhibits tumor necrosis factor alpha production by stimulated human monocytes. J Exp Med 1991, 173:699-703.

- Gordon JN, Goggin PM: Thalidomide and its derivatives: emerging from the wilderness. Postgrad Med J 2003, 79:127-32.
- Gerber HP, Vu TH, Ryan AM, Kowalski J, Werb Z, Ferrara N: VEGF couples hypertrophic cartilage remodeling, ossification and angiogenesis during endochondral bone formation. Nat Med 1999, 5:617-8.
- Bauer JA, Morrison BH, Grane RW, Jacobs BS, Borden EC, Lindner DJ: IFNalpha2b and thalidomide synergistically inhibit tumor-induced angiogenesis. J Interferon Cytokine Res 2003, 23:3-10.
- Raje N, Anderson KC: Thalidomide and immunomodulatory drugs as cancer therapy. Curr Opin Oncol 2002, 14:635-40.
- Meierhofer C, Dunzendorfer S, Wiedermann CJ: Theoretical basis for the activity of thalidomide. Biodrugs 2001, 15:681-703.

doi:10.1186/1546-0096-8-6

Cite this article as: Miyamae et al.: Efficacy of thalidomide in a girl with inflammatory calcinosis, a severe complication of juvenile dermatomyositis. Pediatric Rheumatology 2010 8:6.

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