

Rare Side Effects of Subcutaneous Methotrexate Therapy

To the Editor:

I read with great interest the recent report by Hassanzadeh, *et al*¹. Subcutaneous methotrexate (MTX) may rarely be associated with a number of unique side effects.

Pulmonary complications such as pneumonitis have been reported following the use of subcutaneous MTX². Similarly, the uses of subcutaneous MTX may be associated with the development of tumors such as pyromatrixomas³. Cutaneous B cell lymphomas may develop at the subcutaneous injection site. For instance, Giard, *et al* have reported the development of Epstein-Barr virus-associated B cell lymphomas at the subcutaneous injection site⁴.

Semicircular atrophy is another rare dermatological complication. It is especially seen in children who are administered subcutaneous MTX⁵. It is more common when the MTX is administered in the anterior thigh region. Rarely, the neurological system may also be involved. Neurological symptoms may include weakness and dysmetria². Dysarthria has also been reported following subcutaneous MTX administration. Neurological findings such as hyporeflexia and magnetic gait may be seen.

The above examples highlight the rare complications of subcutaneous MTX and the need to monitor these patients for the development of these side effects.

SHAILENDRA KAPOOR, MD, Mechanicsville, Virginia, USA. Address correspondence to Dr. Kapoor; E-mail: shailendrakapoor@yahoo.com

REFERENCES

1. Hassanzadeh R, Mangan C, France J, Bawa S. Subcutaneous methotrexate to cut costs? [letter]. *J Rheumatol* 2012;39:1764-5.
2. Sommer WH, Ganiere V, Gachoud D, Keta A, Abou-Hajar A, Dudler J, et al. Neurological and pulmonary adverse effects of subcutaneous methotrexate therapy. *Scand J Rheumatol* 2008;37:306-9.
3. Afonso Perez E, Garcia Porrua C, Castineiras Mato IM, Bal Nieves F. Development of pyromatrixoma after the subcutaneous injection of methotrexate for the treatment of juvenile idiopathic arthritis. *Rheumatol Clin* 2012;8:380-1.
4. Giard C, Avenel-Audran M, Croue A, Verret JL, Martin L. Primary cutaneous Epstein-Barr virus-associated B-cell lymphoma arising at the site of subcutaneous injections of methotrexate. *J Clin Oncol* 2010;28:e717-8.
5. Haas N, Henz BM, Bunikowski R, Keitzer R. Semicircular lipoatrophy in a child with systemic lupus erythematosus after subcutaneous injections with methotrexate. *Pediatr Dermatol* 2002;19:432-5.

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