

Hypopigmentation after intra-articular corticosteroid injection

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DESCRIPTION

Intra-articular corticosteroid injection may be associated with several adverse effects.¹ Identification of aetiology of hypopigmentation in a child with juvenile idiopathic arthritis is important to guide appropriate therapy. A 10-year-old girl, with poly-articular juvenile idiopathic arthritis, presented with hypopigmentation over right wrist joint of 1-week duration. She had received oral naproxen for 6 weeks followed by weekly subcutaneous methotrexate (15 mg/m²). Triamcinolone acetonide (40 mg) was injected in her right wrist joint for persistent arthritis. Four weeks later, hypopigmentation was noted (figure 1). Systemic examination was unremarkable. Her blood counts, renal and liver function tests were normal. Hypopigmentation in our patient was attributed to intra-articular corticosteroid injection given the temporal association.

Triamcinolone injection into inflamed joints is a routine practice for paediatric rheumatologists. It may often result in local side effects including atrophy, calcification, hyperpigmentation and hypopigmentation of overlying skin.¹ Pigmentary changes after steroid injection in adults with tenosynovitis have also been reported.² Hypopigmentation is usually seen after a few weeks of corticosteroid injection and may be more prominent in dark skinned individuals.³ It is more frequently seen in small or superficial joints as compared with large joints. Function or number of melanocytes may be affected though the exact mechanism underlying hypopigmentation due to injected corticosteroids

remains unknown.³ Hypopigmentation may depend on the concentration and preparation of the injected corticosteroid. Triamcinolone is more likely to cause local side effects because of its high density, low solubility and high tendency to aggregate. There is no specific therapy and hypopigmentation usually resolves after a few months.³ A careful history can elicit the cause of hypopigmentation in these patients. Patients need to be counselled and educated regarding the adverse effects that may be seen after intra-articular corticosteroid injections, including hypopigmentation. Paediatric rheumatologists and dermatologists need to be aware of this uncommon outcome as it can affect the diagnostic plan and therapeutic measures.

Learning points

- ▶ Hypopigmentation may be seen after a few weeks of intra-articular corticosteroid injection.
- ▶ Hypopigmentation following intra-articular corticosteroid administration usually resolves after a few months and warrants no specific therapy.

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Figure 1 Hypopigmentation over the right wrist joint noted 4 weeks after intra-articular triamcinolone injection.



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