A Rare Case of Iatrogenic Calcinosis Cutis in A New Born Following Calcium Gluconate Infusion

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INTRODUCTION:

Extravastion of fluid during intravenous infusion are common in infants due to their thin fragile veins. Rarely, extravasation of Iv calcium gluconate can lead to soft tissue calcification known as Calcinosis Cutis. This case report describes one such case.

REPORT:

Full term baby boy weighing 2.5kg was admitted to the neonatal ward due to jaundice and hypocalcemia as his serum calcium level was 1.83. Two doses of concentrated bolus of Iv calcium gluconate was started for the duration of 30 min for two consecutive days using the same peripheral intravenous catheter. Child was discharged after calcium level was normalised. Four days later a swelling was noted over the previous intravenous infusion site. The swelling extended from the base of the right thumb until the distal third of the forearm and hard in consistency. It did not seem to cause pain but there was slight limitation of movement of the right wrist as compared to the contra-lateral side. preliminary diagnosis thrombophlebitis was issued warranting a regular dose of antibiotic. A radiograph of the left forearm showed soft tissue calcification without disruption of the adjacent bone structure. Ultrasound revealed an intramuscular hyper echoic lesion at radial aspect of right wrist with no intralesional vascularity mixture seen. Eventually a revised diagnosis of Iatrogenic calcinosis cutis was made and conservative management was employed by means of reassurance to mother and close monitoring of the swelling in case of spontaneous resolution.



Figure 1: Indurated swelling of right wrist



Figure 2: Radiograph of right wrist depicting calcification

CONCLUSION:

History of previous calcium gluconate infusion should not be neglected to prevent misdiagnosis of calcinosis cutis. Meticulous vigilance have to be practiced when infusing calcium infusion in infants to prevent said condition.

REFERENCES:

1. Arora A, Agarwal A, Kumar S, Gupta S. Iatrogenic Calcinosis Cutis—A Rare Differential Diagnosis of Soft-Tissue Infection in a Neonate: A Case Report. *Journal of Orthopaedic Surgery*. 2005;13(2)