



Assessing Iron Concentration in Pediatric Multivitamin Preparations in Mafraq Hospital to Prevent Possible Iron Toxicity

Al Aqqad *¹, Tarek Zarzour ²

1,2. Pediatric Resident, Mafraq Hospital, Abu Dhabi, UAE.

Corresponding Author: Al Aqqad, Pediatric Resident, Mafraq Hospital, Abu Dhabi, UAE.

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Background

Vitamin D is routinely prescribed to all babies after discharge from Maternity ward as per AAP guidelines. During the pediatric grand round meeting, a point was raised as many pediatric physicians were not prescribing multivitamins to children due to fear that they contain high concentration of iron

AIMs

Our aim was to assess the concentration of iron content in pediatric multivitamin preparations available in Mafraq Hospital pharmacy and increase physician awareness in the pediatric department to allow pediatricians to prescribe the multivitamins to their patients if needed.

Methods

A collaboration was made with the clinical pharmacists in Mafraq Hospital and all pediatric multivitamin preparations were assessed for their iron content. A review of the electronic medical records was made to correlate preparations of pediatric multivitamins available in Mafraq Hospital with the orders shown on the system.

Name of product In the pharmacy	Form	Contents of vitamin D and iron	Name in Cerner	Availability In pharmacy
Pediavit oral solution Cholecalciferol (vitamin d 3)	solution	Each 1 ml has 400 units of vitamin D3	Cholecalciferol Oral liquid	Available
Provita D2 oral drops	Oral drops	Each drop has 200 units of vitamin D2	Ergocalciferol oral	Available
Multi-Delyn Liquid (multivitamin)	solution	Each 5 ml contains: Vitamin D 360 IU No Iron	Multivitamin solution	Available
Mixavit syrup	solution	Each 5 ml contains: Vitamin D 500 IU No Iron	Mixavit oral solution	Available
Mixavit oral drops	drops	Each 0.6 ml contains: Vitamin D 400 IU No Iron	Mixavit drops	Available
Poly-Vi-Sol Drops	drops	Each drop contains: Vitamin D 400 IU Iron 10 mg	Poly-vi-sol (multivitamin) Drops	Not available

Results

Analysis revealed three pediatric multivitamin preparations available in Mafraq hospital in oral solution or drops form none of which contained iron.

The only oral solution that contained high concentration of iron was discontinued in our hospital. After confirmation with the pharmacy, a report was taken to the electronic medical records department and the name of the multivitamin preparation that is not available was removed from the electronic medical records program used in the hospital.

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Conclusion

Clarification that multivitamin preparations in oral solution or drop form does not contain iron has helped pediatricians in Mafraq Hospital prescribe those preparations without worrying about possible iron toxicity in their patients.