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**Molecular assessment of vitamin D receptor polymorphism as a valid predictor to the response of interferon/ribavirin-based therapy in Egyptian patients with chronic hepatitis C.**

[Abdelsalam A](https://www.ncbi.nlm.nih.gov/pubmed/?term=Abdelsalam%20A%5BAuthor%5D&cauthor=true&cauthor_uid=27128845)1, [Rashed L](https://www.ncbi.nlm.nih.gov/pubmed/?term=Rashed%20L%5BAuthor%5D&cauthor=true&cauthor_uid=27128845)2, [Salman T](https://www.ncbi.nlm.nih.gov/pubmed/?term=Salman%20T%5BAuthor%5D&cauthor=true&cauthor_uid=27128845)3, [Hammad L](https://www.ncbi.nlm.nih.gov/pubmed/?term=Hammad%20L%5BAuthor%5D&cauthor=true&cauthor_uid=27128845)4, [Sabry D](https://www.ncbi.nlm.nih.gov/pubmed/?term=Sabry%20D%5BAuthor%5D&cauthor=true&cauthor_uid=27128845)2.

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**Abstract**

**OBJECTIVE:**

The aim of this study was to find an association between serum concentration of vitamin D and vitamin D receptor (VDR) polymorphisms to achieve a sustained virological response (SVR).

**METHODS:**

We conducted a case-control study in which 250 participants were recruited and divided into three groups (100 chronic hepatitis C [CHC] patients who achieved SVR, 100 CHC patients who did not achieve SVR and 50 apparently healthy individuals as controls). Blood samples were collected to measure serum vitamin D concentration, and four VDR polymorphisms (FokI, ApaI, TaqI, and BsmI) were detected using polymerase chain reaction-restriction fragment length polymorphism.

**RESULTS:**

Non-responders were found to have significantly low vitamin D concentration compared with responders and control groups. Concerning VDR polymorphisms, both FokI and TaqI polymorphisms were associated with successful treatment.

**CONCLUSION:**

Vitamin D concentration, FokI, and TaqI may be considered as the predictors for the response of CHC patients to a combination therapy of pegylated interferon and ribavirin