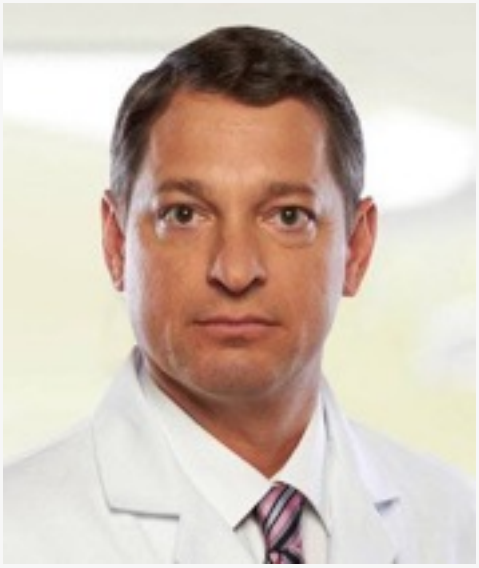
Meningioma Study: Depo-Provera and Its Observed Mutation Shift

Study reveals Depo-Provera exposure causes distinct genetic mutations in meningiomas, with increased risk of multiple tumors, particularly at the skull base


Dr. Greg Vigna

SANTA BARBARA , CA, UNITED STATES, January 10, 2025 /EINPresswire.com/ -- “This shift in mutational landscape indicates the vulnerability of certain meningeal cells and mutations to hormone-induced tumorigenesis,” states M. Peyre, Neurosurgeon.

Greg Vigna, MD, JD, national pharmaceutical injury attorney, states, “This study is pointing toward direct evidence that Depo-Provera causes mutations. The DNA footprint of meningiomas in women exposed to Depo-Provera is different when compared with those who develop meningiomas without exposure. In addition, Depo-Provera meningiomas have an increased tendency to be multiple and located at the skull base.”

What did Dr. Peyre report in “Progestin-associated shift of meningioma mutational landscape” published in Annals of Oncology. Vol. 29, Issue 3, March 2018, Pg. 681-686?:

> The DNA footprint of meningiomas in women exposed to Depo-Provera is different when compared with those who develop meningiomas without exposure.”
>
> *Greg Vigna, MD, JD*

“The main result of our study is the increased frequency of PIK3CA mutations (35%) in progestin-associated meningiomas compared with the control population.

While several epidemiologic and observational studies have suggested a role for hormonal modulation in the development and progression of meningioma, the relationship between hormone intake and the molecular biology of the tumors has never been explored. Here, for the first time, we explore the molecular basis of progestin-associated meningiomas. We show that at least a fraction of progestin-associated meningiomas are characterized by a specific mutational landscape, defined by a reshuffle of frequencies of known mutated genes compared with the control.”

Read Dr. Peyre's article: https://www.sciencedirect.com/science/article/pii/S0923753419354882

Dr. Vigna adds, "Clearly, the physicians in this study answered a very important question as to one of the possible mechanisms for the increased risk of meningiomas in women exposed to 1-year of Depo-Provera."

Vigna Law Group is a national litigation firm that focuses on neurological injuries caused by medical malpractice, mid-urethral slings, and drugs including Depo-Provera. Other practice areas include hospital acquired decubitus ulcers and birth injuries. His California and Washington DC law firms represents women who required craniotomies for meningiomas with the Ben Martin Law Group, a national pharmaceutical injury law firm in Dallas, Texas.

Read Dr. Vigna's FREE BOOK, "Mother's Guide to Birth Injury".

Click here for a FREE BOOK on Vaginal Mesh Pain by Dr. Vigna.

To learn more, visit the Meningioma Resection Help Desk.

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