Pseudotumor Cerebri

Mitos y verdades de su relación con Mirena

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Mirena Lawsuit – Pseudotumor & Intracranial Hypertension

As of June 2017, nearly two-hundred lawsuits have been filed alleging Mirena caused their intracranial hypertension. These cases are different from the perforation and migration cases that have been filed over the past few years. Given how new this litigation

If you are considering a Mirena lawsuit, contact our lawyers today for a free, confidential consultation. Our law firm is currently filing Mirena lawsuits alleging that the IUD, which uses a synthetic form of progestin, causes serious side effects, including *idiopathic intracranial hypertension* and *pseudotumor cerebri*, a condition in which increased blood pressure in the brain causes symptoms similar to a brain tumor. These brain injuries can lead to vision loss, damage to the optic nerve (papilledema), migraines, tinnitus, and can require surgical treatment.

Mirena Lawsuit-Pseudotumor&Intracranial hypertension. Maxwell S. Kennerly, Esquire (litigationandtrial.com/mirena-lawsuit-brain-injury/)

Mail Online

Hundreds of women claim their IUD gave them a neurological disorder - but it may simply be a coincidence, expert says

- Mirena is one of the most popular IUD birth controls
- Bayer is being sued by 856 women who say the product gave them a neurologial condition called idiopathic intracranial hypertension
- The disorder's exact causes are not known
- Risk factors include being a woman of reproductive age - the same demographic that is likely to use the popular IUD
- Mirena has been dogged by millions of dollars worth of other lawsuits

Does Bayer's Mirena Cause Pseudotumor Cerebri?

JAY W. BELLE ISLE — July 14, 2016

There is a new $64,000 question in legal circles this summer. It involves a wildly popular form of birth control and an incredibly awful potential side effect. What is that question? Simply put, does Bayer's Mirena® cause pseudotumor cerebri?

There is a new $64,000 question in legal circles this summer. It involves a wildly popular form of birth control and an incredibly awful potential side effect. What is that question? Simply put, does Bayer's Mirena® cause pseudotumor cerebri?

The lawsuits are being filed and, ultimately, this question will find its way into the courtroom. Before we go further, it may be a good idea to explain pseudotumor cerebri (PTC). This condition, while not fatal, is nonetheless extremely painful and can cause permanent damage to those who suffer from it. Another name for PTC is intracranial hypertension (ICH). At its most basic definition, PTC is a build-up of excess cerebrospinal fluid in the skull.

- ¿Qué es el pseudotumor cerebrii o la hipertensión intracraneal idiopática?
- Métodos anticonceptivos solo gestágenos.
- ¿Hay alguna relación entre ambos, o es casualidad?

Hipertensión intracraneal idiopática

Hipertensión intracraneal idiopática (HII)

"Pseudotumor cerebri"

- Aumento P.intracraneal + ausencia pat.orgánica

Epidemiología

- Incidencia: 1-2 casos/100000 personas/año
- Etiología: desconocida
- +frec: ♀, >20% peso ideal, edad fértil.

Hipertensión intracraneal idiopática

Clínica:

- **Cefalea** (pulsátil, persistente)

  ~Dolor retroocular, tinnitus, rigidez de cuello

- Síntomas oculares (**dism. agudeza visual**, escotomas, fotopsias, diplopia…ceguera permanente)

Hipertensión intracraneal idiopática

Diagnóstico:

- 1º. Prueba de imagen (normal)
- 2º. Punción lumbar.

→Presión (>20mm H2O)

→Pruebas de laboratorio (normales)

→DISMINUIMOS TEMPORALMENTE LA PRESIÓN

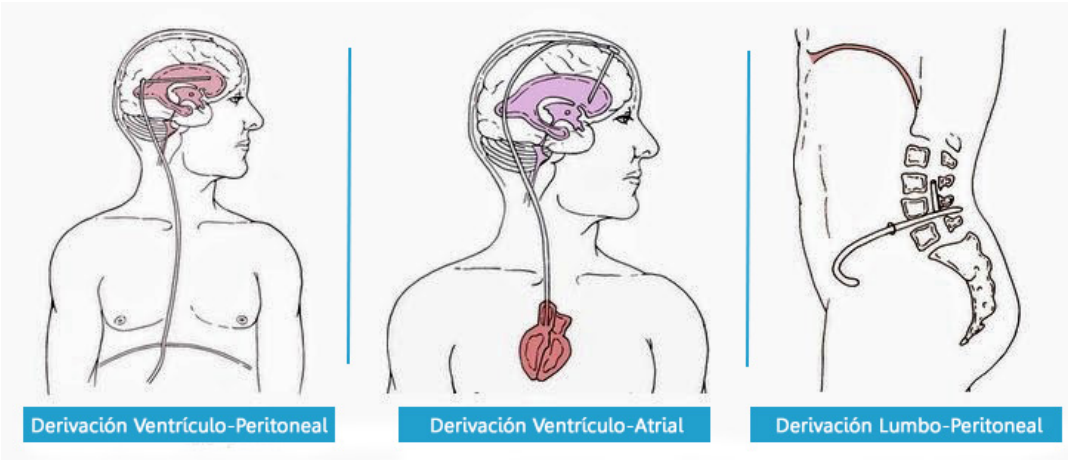
Hipertensión intracraneal idiopática

Tratamiento:

- **Pérdida de peso**

- **Médico**: disminuir producción de LCR *(Acetazolamida, Topiramato, CTC)*; diuréticos.

- Quirúrgico:



Métodos sólo gestágenos

Métodos solo gestágenos (MSG)

- Eficacia anticonceptiva

  -Inhibición secreción LH

  -Aumento densidad moco cervical
  -Atrofia endometrial
  -Inhibición capacitación espermatozoides
  -Disminución motilidad tubárica

- Menor riesgo trombótico → Mayor seguridad

Múltiples formas de presentación y administración**

MSG

Vías de administración:

- Píldora de solo gestágenos
- Implante subdérmico (Implanon NXT- 68mg ENG x 3a)
- Inyectable de AMPD (150mg AMPD 1dosis/12sem)
- DIU- LNG (4 tipos)

	DIU LNG-52mg (MIRENA®)	DIU LNG- 19,5mg (KYLEENA®)	DIU LNG- 13,5mg (JAYDESS ®)	DIU LNG-52 mg (LEVOSERT ®)
Indicación	Anticoncepción hasta 5 años + Sangrado menstrual abundante	Anticoncepción hasta 5 años	Anticoncepción hasta 3 años	Anticoncepción hasta 5 años + Sangrado menstrual abundante
Eficacia (índice de Pearl*)	0,11 a 5 años	0,29 a 5 años	0,33 a 3 años	0,21 a 4 años
Duración máxima de uso	5 años	5 años	3 años	5 años
Contenido total de LNG	52 mg	19,5 mg	13,5 mg	52mg
Patrón de sangrado menstrual tras 1 año	Amenorrea:20- 40% Sangrado infrecuente: 57 %	Amenorrea: 12 % Sangrado infrecuente: 26 %	Amenorrea: 6 % Sangrado infrecuente: 20 %	Amenorrea: 18,6% Sangrado infrecuente: 29%
Tasa diaria media de liberación de LNG in vivo durante el primer año	20µg/24 horas	12 µg/24 horas	8 µg/24 horas	17µg/24 horas
Dimensiones de la estructura en T (mm)	32 x 32 x 2,8	28 x 30 x 1,55	28 x 30 x 1,55	32x32
Diámetro del tubo de inserción	4,40 mm	3,80 mm	3,80 mm	4,80 mm

MSG- Efectos no deseados

- **Alteraciones en el patrón de sangrado**
- Quistes funcionales de ovario
- Cambios en el peso (AMPD)
- Acné y otros s.androgénicos
- Cambios de humor (+ en madres lactantes)
- Nauseas
- Mastodinia
- Dolor abdominal
- **Cefalea**

MSG- Efectos no deseados

Específicos del DIU-LNG: Cefalea

Ficha técnica de Mirena

Table 2 Adverse Reactions ≥ 5% Reported in Clinical Trials with Mirena

System Organ Class	Adverse Reactions	% (N= 5,091)
Reproductive system and breast disorders	alteration of menstrual bleeding pattern, including:	
	unscheduled uterine bleeding	31.9
	decreased uterine bleeding	23.4
	increased scheduled uterine bleeding	11.9
	female genital tract bleeding	3.5
	amenorrhea	18.4
	genital discharge	14.9
	complications	
	dysmenorrhea	6.4
Gastrointestinal disorders	abdominal/pelvic pain	22.6
Nervous system disorders	headache/migraine	16.3
Musculoskeletal and connective tissue disorders	back pain	7.9
Skin and subcutaneous tissue disorders	acne	6.8
Psychiatric disorders	depression/depressive mood	6.4

| Nervous system disorders | headache/migraine | 16.3 |

MSG- Efectos no deseados

Específicos del DIU-LNG: Cefalea

Ficha técnica de Mirena

5.10 Clinical Considerations for Use and Removal

- Migraine, focal migraine with asymmetrical visual loss or other symptoms indicating transient cerebral ischemia

- Coagulopathy or use of anticoagulants
- Migraine, focal migraine with asymmetrical visual loss or other symptoms indicating transient cerebral ischemia
- Exceptionally severe headache
- Marked increase of blood pressure
- Severe arterial disease such as stroke or myocardial infarction

In addition, consider removing Mirena if any of the following conditions arise during use *[see Contraindications (4)]*:

- Uterine or cervical malignancy
- Jaundice

MSG- Efectos no deseados

Específicos del DIU-LNG: Cefalea

¿Y que hay del <u>riesgo de HII</u>?

¿HII ~ MSG?

Levonorgestrel Implants and Intracranial Hypertension

June 22, 1995
N Engl J Med 1995; 332:1720-1721
DOI: 10.1056/NEJM199506223322519

This article has no abstract; the first 100 words appear below.

To the Editor: Levonorgestrel (Norplant, Wyeth–Ayerst Laboratories, Philadelphia) is a subdermally implanted synthetic progestin that has been available in the United States since 1991. Intracranial hypertension developed in two women seen at the Oregon Health Sciences University after the insertion of this implant. We reviewed data from the national Registry of Drug-Induced Ocular Side Effects (Casey Eye Institute, Portland, Oreg.), the Food and Drug Administration's Spontaneous Reporting System (Rockville, Md.), and the World Health Organization's Collaborating Center for International Drug Monitoring (Uppsala, Sweden) for a possible association between levonorgestrel use and intracranial hypertension. A total of 56 cases of intracranial . . .

En 1995, Alder Fraunfelfel y Edwards, describieron 2 casos de mujeres que utilizaban Norplant (LNG 36 mg) y que desarrollaron HII.

¿HII ~ MSG?

Serious adverse events in Norplant users reported to the Food and Drug Administration's MedWatch Spontaneous Reporting System.

Wysowski DK[1], Green L.

OBJECTIVE: To describe serious adverse events in Norplant users from reports submitted to the Food and Drug Administration's (FDA) MedWatch Spontaneous Reporting System.

METHODS: Reports of certain serious adverse events in Norplant users in the United States from February 1991 to December 1993 were reviewed and analyzed.

RESULTS: From the introduction of Norplant in the United States in February 1991 to December 1993, the FDA received reports of 24 women hospitalized for infections at the insertion site, 14 hospitalized or disabled because of difficulties removing the capsules, 14 hospitalized for stroke, three for thrombotic thrombocytopenia purpura, six for thrombocytopenia, and 39 for pseudotumor cerebri. The comparison of reported rates with expected rates and the relationship of some of these disorders with oral contraceptives raises the suspicion of a causal association with Norplant.

CONCLUSIONS: The FDA has received reports of hospitalization or disability for infections, capsule removal difficulties, stroke, thrombotic thrombocytopenia purpura, thrombocytopenia, and pseudotumor cerebri in Norplant users. Health care professionals need to be trained in Norplant insertion and removal to ensure the proper technique. Studies are needed to determine if stroke, thrombocytopenia, and pseudotumor cerebri are causally related to Norplant use.

La Food and Drug Administration (FDA) recibió 39 casos de usuarias de Norplant que desarrollaron HII. En 4 cedieron los síntomas al quitar el implante, 16 al retirarlo, y 6 siguieron igual a pesar de retirarlo.

¿HII ~ MSG?

Correspondence | Published: 27 January 2006

Idiopathic intracranial hypertension associated with depot medroxyprogesterone

J W Chan

A 23-year-old woman with a body mass index of 28.2 kg/m^2 presented with a 3-week history of retro-orbital pain and headaches associated with horizontal diplopia, photopsias, tinnitus, and nausea. Her past medical and f
was contrace
Provera), whi

This report demonstrates more convincing evidence linking depot medroxyprogesterone acetate with the development of IIH. Withdrawal of this medication in the patient resulted in complete resolution of IIH, as evidenced by a normal neuro-ophthalmic examination and a CSF opening pressure of 131 mm H_2O after 4 months. This wash-out period

¿HII ~ MSG?

Risk of intracranial hypertension with intrauterine levonorgestrel

Mahyar Etminan,[✉] Hao Luo, and Paul Gustafson

Objectives:

The objective of this study was to quantify the risk of intracranial hypertension (ICH) with the intrauterine levonorgestrel (IUL) device Mirena®.

Methods:

We used the United States Food and Drug Administration's Adverse Events Reporting System (FAERS) database to quantify a reporting odds ratio (ROR) for ICH and Mirena®. We also conducted a retrospective

Conclusion:

We found a higher than expected number of reports of ICH with Mirena® in the FAERS database. We also found a similar risk of ICH with Mirena® compared with the oral contraceptive EE-norgestimate. The higher risk of ICH with EE-norethindrone, another oral contraceptive should be further investigated.

norgestimate and EE-norethindrone compared with Mirena® were 1.29 (95% CI 0.83–2.00) and 0.31 (95% CI 0.04–2.29), respectively. The presence of a strong confounder BMI did not affect the estimated OR (OR = 1.31, 95% CI 0.73–2.41 for EE-norgestimate; OR = 0.18, 95% CI 0.01–1.27 for EE-norethindrone).

Conclusion:

We found a higher than expected number of reports of ICH with Mirena® in the FAERS database. We also found a similar risk of ICH with Mirena® compared with the oral contraceptive EE-norgestimate. The higher risk of ICH with EE-norethindrone, another oral contraceptive should be further investigated.

¿HII ~ MSG?

An Estimation of the Risk of Pseudotumor Cerebri among Users of the Levonorgestrel Intrauterine Device

Reuben M. Valenzuela,[a,b] Ruju Rai,[a] Brian H. Kirk,[a] Jessica N. Sanders,[c] Subhashree Sundar,[d] Steffen Hamann,[e] Judith E. A. Warner,[a,b] Kathleen B. Digre,[a,b] Alison V. Crum,[a,b] Kirtly P. Jones,[c] and Bradley J. Katz[a,b]

Because of a previous association of pseudotumor cerebri (PTC) with levonorgestrel, we wished to evaluate the use of levonorgestrel-eluting intrauterine devices ("levonorgestrel intrauterine systems", LNG-IUS) in our University of Utah and Rigshospitalet PTC patients. In our retrospective series, PTC prevalence was approximately 0.18% and 0.15% in the LNG-IUS population versus 0.02% and 0.04% in the non-LNG-IUS population (Utah and Rigshospitalet, respectively), with no significant differences in PTC signs and symptoms among the two groups. Our investigation suggests that women with an LNG-IUS may have increased risk of developing PTC but does not suggest an LNG-IUS can cause PTC.

¿HII ~ MSG?

Risk of Pseudotumor Cerebri Syndrome (PTCS) with hormonal contraceptive use

Mohit Sodhi, Claire A. Sheldon, Bruce Carleton, Mahyar Etminan

Background: Hormonal cont…en linked with pseudotumor cerebri syndrome (PTCS). To…

Methods: A case-control stu…D-9-CM code for benign intracranial hypertension as…within 15 days of the PTCS code. Controls were selected from…

Results: From a cohort of 9,…adjusted RRs for two or more prescriptions of oral combin…e was 0.91 (95% CI 0.39-2.12) for one prescription of HCs and…ore prescriptions of progestin only HCs were 0.75 (95% CI…

Conclusions: Overall HC use…h progestin-only contraceptives cannot be excluded.

CONCLUSION

Overall use of HCs was seen to have no significant effect on incidence of PTCS, however harm for progestin-only contraceptives cannot be excluded and requires further work to confirm in addition to investigating different HC drug delivery systems. Estrogen containing HCs may be a viable option for women currently taking drugs that may induce PTCS or have comorbidities of PTCS, however further research must be done to determine potential HC benefit or harm.

Conclusiones: ¿HII ~ MSG?

¿Relación causa-efecto?→**Ningún estudio es estadísticamente significativo**

- HII es una enf rara (pocos casos descritos)
- ¿Comorbilidad de las usuarias, aumenta el riesgo de HII?
- ¿Solo LNG causa HII? ¿Y los gestágenos endógenos?

Conclusiones: ¿HII ~ MSG?

Son necesarios más estudios para valorar relación MSG-HII:

¿Es inherente el riesgo a algún método anticonceptivo en concreto o al común de los MSG…

…o las causas que nos llevan a pautar MSG pueden ser determinantes de su desarrollo?

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Gracias!