

Non-genetic familial transmission of fibromyalgia: role of sexual abuse?

Sirs,

Despite the publication of few articles in the past suggesting the role of childhood violence or sexual abuse (1-4), this aetiology of fibromyalgia (FM) remains controversial because of the difficulty to manage double blind studies on the subject (5).

Nevertheless, it could be possible that rheumatologists clinically evoke the role of sexual abuses during their consultations.

We describe a seven-case series of fibromyalgia associated with childhood sexual abuses. Each patient underwent several visits to fulfil the diagnosis of fibromyalgia, meeting the 2010 or 2010 modified ACR criteria, and all complementary investigations to screen all others pathologies were done.

We introduced 3 additional questions at the anamnesis, asked in the following order:

a) Did you experience any violence during your childhood? b) Might you have suffered sexual violence or abuse? Based on the whether or not siblings where mentioned during the initial interviews, the third question might then asked c) Did your brothers or sisters suffer this type of violence?

In this way 7 patients of 3 family groups of sisters were able to be questioned.

All the reported cases were women. The mean age at time of diagnosis was 46.9 years, while the mean age at time of the first sexual violence was 11 years and 2 months. The clinical features of our 7 patients are summarised in Table I.

The latency period between the sexual violence and the verbal expression of the trauma experienced was 34.5 years. Six of the 7 patients had divorced, including 4 of 7 who divorced twice or even 3 times. We observed that sexual abuse was linked by physical violence in the intra-family environment for all the patients.

In 6 out of 7, the mother played a role in the participation in physical violence.

The medical history of C1 reveals a number of consultations for functional troubles in various medical departments from 2007 to 2019 (Table II).

A deeper anamnesis made it possible to establish a genealogy of sexual abuses within the same family (B) revealing the repetitiveness and systematisation of rape and violence against female children (Fig. 1).

These clinical data confirm how difficult it is for victims to talk about trauma experienced at time when it happened and the latency period between the time of sexual abuse and verbal expression of the abuse is measured in several decades.

The duration of the latency period is practically equivalent of the duration of a woman's fertility, a sufficient time to potentially induce pathogenic and neurologic epigenetic changes (6-8). All of those women had experienced a diffuse pain syndrome for many years before the diagnosis. The

Table I. Demographics and other characteristics of the seven patients who participated in the study.

	Sex	Age at diagnosis (year)	Direct family group	Marital status	Number of children	Physical violence	Psychological violence	Sexual abuse	Suicide attempt	Battered woman	Consumption of psychotropics and tobacco products	Profession	Latency period (year)	Modified 2010 ACR criteria
A1	F	48	9 5F/4M	Married 2x Widowed 1x	2	+	+	7 years 1 family friend 12 years teacher primary school	5 x	+	+	0	41	+
A2	F	51	9 5F/4M	Married 3x Divorced 2x Currently separated	0 Sterility following repeated abortions	+	+	+	0	+	+	0	42	+
A3	F	49	9 5F/4M	Divorced 2x	0 Abortion	+	+	15 years forced marriage	2 x	+	+	Secretary	34	+
B1	F	46.5	4 3F/1M	Divorced 2x	2 different fathers 2M	+	+	11 to 17 years father mother passive	0	0	+ for 8 years currently stopped Smoker	0	21	+
B2	F	48	4 3F/1M	Divorced 3x	3 children 1F/2M	+	+	12 to 18 years father mother passive	0	0	+	0	31	+
B3	F	44	4 3F/1M	Divorced 1x	1 child 1M	+	+	11 to 18 years	0	?	?	Cleaning lady	+ 30 years	?
C1	F	42	3	married	5	Grandfather	+	12 to 13 years	0	0	0	0	32	+

Table II. Heteroanamnesis of patient C1.

	1974	1986-1987	1994	2007	2011	2012	2013	2015	2016	2018
Birth	Sexual abuse by the grandfather	Marriage	Dyspnoea related to nervousness. Adnexal pain. Evaluation negative.	Palpitations. Administration of Sipralexa	Tinnitus. Evaluation negative.	Supra-pubic pain. Evaluation negative. Gastric ulcer. Diagnosis of depression. Administration of alprazolam	Coccydynia. Evaluation negative.	Episodes of hysteria, opinion requested from a psychiatrist. The interested party did not mention the abuse.	Malaise. Headache. Diagnosis of fibromyalgia.	

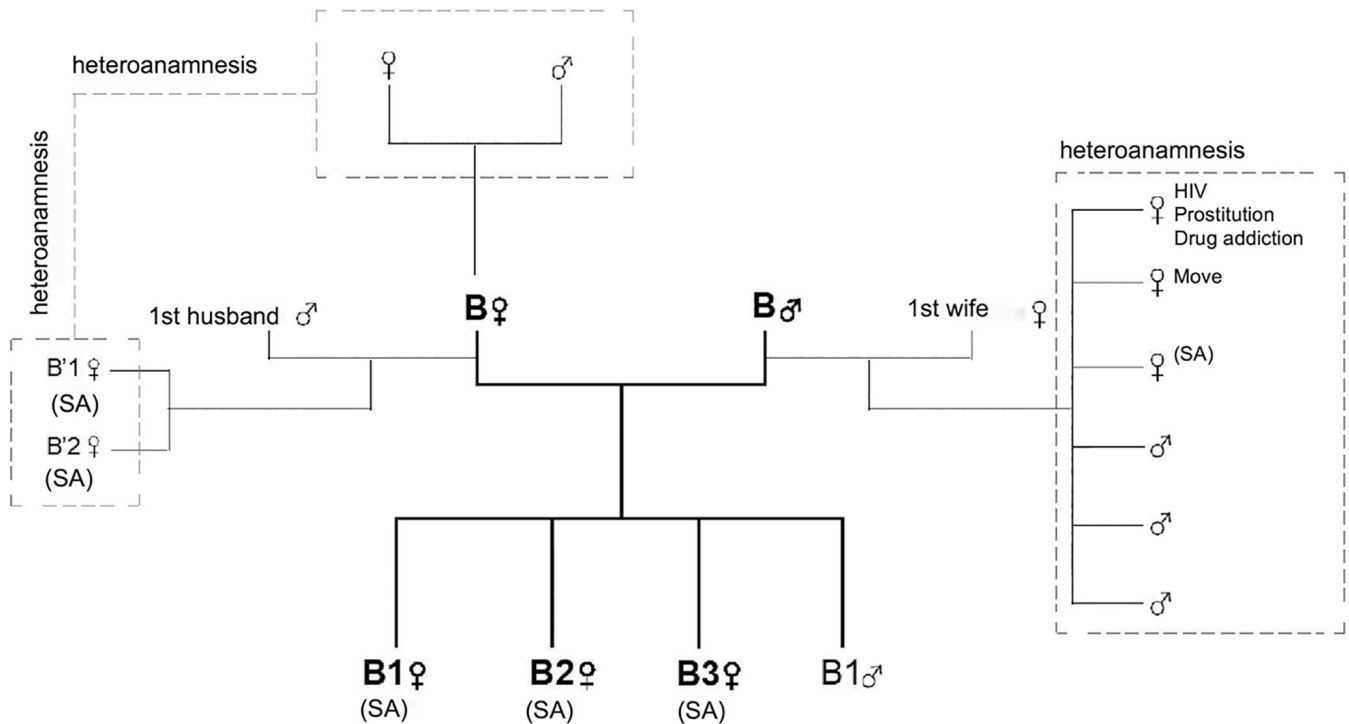


Fig. 1. Genealogy of abuse in family group B.

socio-economic damage is considerable, as the young women were not able to complete their studies and 4 of them are unable to work full-time (9, 10).

Indeed, the similarity of the medical anamnesis and objective facts related to the history of these persons with fibromyalgia suggest an initial cause of mistreatment and sexual abuse.

More essentially, it also indicates the inability of patients' medical attendants and relatives to successfully identify potential abuses and link them to the symptoms.

The «surface» pain may therefore be an interface between the body and the patient's environment.

This report highlights the hypothesis that there is no fibromyalgia gene related to X chromosome and claims that this complex disease should be linked to deviant human behaviours. Therefore, it is also up to practitioners to consider and bring up such topics when a diagnosis of fibromyalgia is suspected.

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