



Evidence based answers: could sildenafil cause rape?

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The setting

Mr LD, 48 years of age, presented with long standing impotence. He was concerned this would adversely affect the relationship with his new girlfriend of 3 weeks. Initial evaluation included history and physical examination. Relevant pathology tests did not reveal an obvious cause for his impotence other than past depression.

'What about Viagra, doc?' he asked, 'She's going to leave me if I don't do something'.

My concern was that I knew he was on parole from a 5 year prison sentence for raping his ex-wife. Management options had to be discussed. I deferred this decision to give myself time to think about the complex issues, and asked him to come back in 2 weeks.

Asking the question

I considered the ethical and information issues – at least if I gain some evidence based knowledge, I should be better able to wrestle with the ethical dilemmas. The important questions seemed to be:

- can sildenafil cause an increased risk of rape?
- should this man's prison and psychiatric history influence my prescribing?

I raised the problem at our weekly clinical question answering club (C-QAC), and it provoked an interesting discussion. The resulting question formulation for a literature search was as follows: among impotent convicted male rapists (**P**atient), what is the chance that sildenafil (**I**ntervention) would be more likely than no impotence treatment (**C**omparison) to lead to rape (**O**utcome)?

Accessing the information

We decided what type of research would be required to answer the question. Clearly a randomised controlled trial on this specific **PICO**

would not be ethical, so the Cochrane database was not likely to be helpful. Observational studies, case control studies or legal cases seemed to have the best chance of giving us the information we needed. We went to the 'clinical queries' page of PubMed (this link can be found on the left of the PubMed home page) and entered the terms: 'sildenafil' and 'rape'. There was one 'hit'. 'Neurologic, psychological and aggressive disturbances with sildenafil' published in the *Annals of Pharmacotherapy*.¹

Assessing the evidence

The article was written in the United States to assist the defence in the trial of a man accused of rape, in which sildenafil was implicated. The objective was to find scientific information linking sildenafil and aggressive behaviour. PubMed and Medline had been searched using specified search terms. Information was also obtained on adverse events from the Food and Drug Administration (FDA). With these data, the authors proposed a pathophysiological or neurochemical basis for their hypothesis that sildenafil causes aggression. They also noted 13 adverse events reported to the FDA for rape where sildenafil was cited. The reviewers did not specify the use of other databases such as EMBASE or Current Contents and did not discuss how articles were considered for inclusion or how they were evaluated. Finally, no empirical evidence was presented linking sildenafil and rape.

Applying the evidence

The search showed that other people had been concerned with the same issue, although with different motivations. Before conducting the search, my concern was that sildenafil would facilitate penile rape by enabling Mr LD to gain an erection. It had not

occurred to me that sildenafil may cause aggression. However, it found no empirical evidence of a causal relationship between sildenafil and rape. We did not search legal databases, although it appeared from the article as though sildenafil has not been successfully used as a defence in a rape case.

When Mr LD returned, he expressed concerns about how the parole board would view him taking sildenafil, therefore we are presently focussing on the relationship and psychological aspects of his erectile dysfunction.

Discussion

While the search for evidence did not lead me to research that answered my question, the process of searching clarified the issues and expanded the scope of my thinking. It was also helpful to me that our practice has a forum (the C-QAC) in which to discuss these difficult cases.

Acknowledgment

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Reference

1. Milman HA, Arnold SB. Neurologic, psychological, and aggressive disturbances with sildenafil. *Ann Pharmacother* 2002;36:1129-1134.

AFP

Rape is a heinous crime that has more to do with an abuse of power than disordered sexual function. The social, ethical and legal questions raised by this patient's presentation are far more complex than the clinical one. Legal databases show 6 cases of erectile dysfunction treatment being proposed as a defence for rape – none has been successful in mitigating the charge.

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