

BACKGROUND

Background:

Selective serotonin reuptake inhibitors (SSRIs) are one of the first-line treatments for anxiety and depression given their efficacy and generally favorable side effect profile. Dermatological reactions are relatively rare and previously reported to be approximately 11% of adverse reactions, typically consisting of rash, pruritus and urticaria (Spigset 1999). There have been several case reports of these reactions associated with SSRIs, such as fluoxetine, escitalopram and sertraline. The time to resolution of rash varied, with studies finding resolution as early as 48 hours and as late as up to 5 weeks (Cederberg 2004, Byrne 2017). There are several case reports regarding cross-reactivity between SSRIs, specifically between fluoxetine and sertraline, to suggest that switching classes of antidepressants should be considered (Warnock 2002, Khairkar 2010). To our knowledge, there are no published case reports of potential cross-reactivity between sertraline and escitalopram. Further, management strategies differed among the above cases, with some avoiding all medications within the same class and utilizing a different medication class such as serotonin norepinephrine reuptake inhibitors (SNRIs), while others found success with alternatives within the same class.

Case Presentation:

A 30-year-old married G1P1001 female with a history of generalized anxiety disorder was referred to the Perinatal Psychiatry Clinic for postpartum depression and anxiety. Her chief complaint was the recent development of a rash in the setting of starting escitalopram, noting recent improvement in anxiety and depressive symptoms since starting this medication. She denied previous trials of psychotropics and the remainder of her history is noncontributory.

CASE

Treatment Course:

Week 0	Escitalopram 10 mg daily initiated
Week 1	Pruritic rash developed behind both ears
Week 5	Escitalopram titrated to 20 mg daily Pruritic, erythematous rash spreading to trunk and lower extremities
Week 6	Intake in Perinatal Psychiatry Clinic Escitalopram decreased to 10 mg daily, discontinued after 7 days Sertraline 50 mg initiated, increased to 100 mg daily after 7 days
Week 9	Follow-up visit at which rash had resolved Sertraline increased to 150 mg daily
Week 12	Patient developed a pruritic erythematous rash on her right breast that spread to her trunk and extremities
Week 13	Patient seen by dermatology and biopsy obtained (results below) Recommended decreasing sertraline to 100 mg daily.
Week 14	Follow-up visit at which sertraline 100 mg daily was discontinued and duloxetine 30 mg daily initiated
Week 15	Follow-up visit at which rash was improving and duloxetine increased to 60 mg daily
Week 18	Rash resolved

CLINICAL DATA: Drug rash vs ID reaction vs Hypersensitivity reaction

SPECIMEN SITE: Left proximal dorsal forearm

GROSS DESCRIPTION:

The tissue, submitted in formalin, is a punch excision of skin measuring 3mm in diameter by 3mm in length.

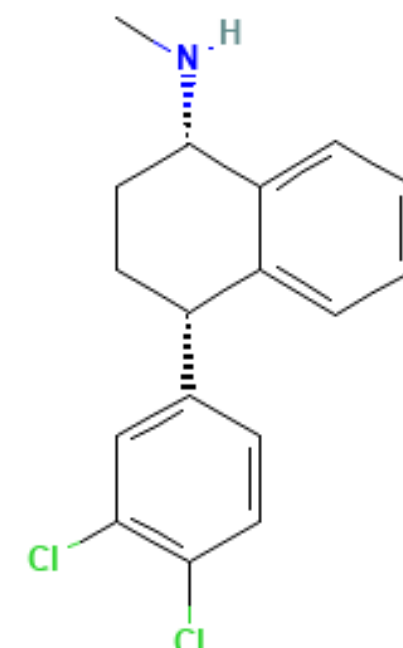
MICROSCOPIC DESCRIPTION:

The sections show a punch portion of skin down to subcutaneous fat. The epidermis is mildly acanthotic. There is superficial and mid dermal perivascular infiltrate of inflammatory cells. The infiltrate is mixed and is composed of lymphocytes, histiocytes, neutrophils and scattered eosinophils. There is dermal telangiectasia. A vasculitis is not observed. After H&E examination, additional sections stained with PAS technique appear negative for fungal yeast or hyphae. Control stains are adequate.

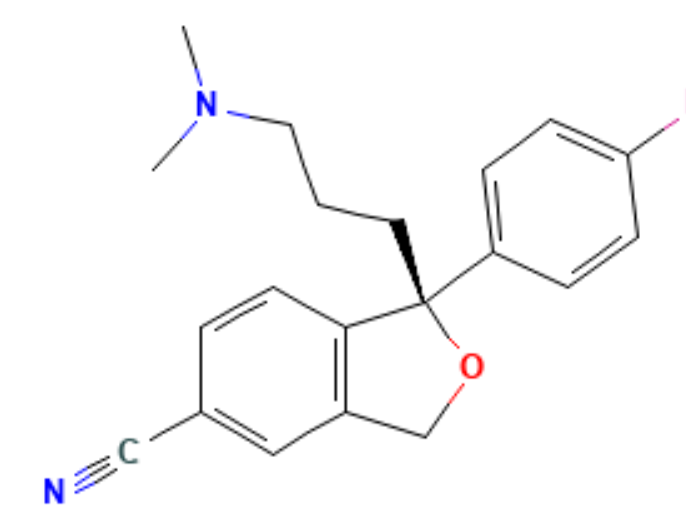
DIAGNOSIS: PERIVASCULAR DERMATITIS CONSISTENT WITH DERMAL HYPERSENSITIVITY REACTION OR A DRUG ERUPTION.

IMAGES

Sertraline



Escitalopram



Above images adapted from <https://pubchem.ncbi.nlm.nih.gov>



Picture of right forearm at week 12 of treatment

CONCLUSIONS

Discussion:

This case suggests a potential cross-reactivity between sertraline and escitalopram regarding risk of developing dermatological adverse events, despite chemically different structures. This further supports an emerging number of case reports to suggest cross-reactivity between SSRIs.

Conclusions:

Consider switching antidepressant classes after development of a suspected SSRI-induced rash due to a growing body of evidence suggesting a cross-reactivity between SSRIs.

References:

1. Spigset O. Adverse reactions of selective serotonin reuptake inhibitors: reports from a spontaneous reporting system. 1999 Mar;20(3):277-87. doi: 10.2165/00002018-199920030-00007
2. Cederberg J, Knight S, Svenson S, et al. Itch and skin rash from chocolate during fluoxetine and sertraline treatment: case report. *BMC Psychiatry*. 2004;4:36. doi: 10.1186/1471-244X-4-36
3. Byrne A, Arkell S, Bandi P. SSRI-induced severe adverse cutaneous reaction- a case report. *Prog Neurol Psychiatry*. 2017;21(4):9-12.
4. Khairkar *et al*. Possible cross-sensitivity between sertraline and paroxetine in a panic disorder patient. *Indian J Pharmacol*. 2010 Apr;42(2):110-1. doi: 10.4103/0253-7613.64497.
5. Warnock CA and Azadian AG. Cross-sensitivity between paroxetine and sertraline. *Ann Pharmacother*. 2002 Apr;36(4):631-3. doi: 10.1345/aph.1A262.