A case report of sertraline-induced hyperpigmentation

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Abstract

This is a case report of a 27 years old Caucasian lady with Bipolar Affective Disorder that developed hyperpigmentation, after starting sertraline for low mood. Her current medications also included semi sodium valproate 1000 mg orally daily, quetiapine modified release 400 mg orally daily, tramadol 50mg orally twice a day and co-codomol orally on an as required basis for back pain. She denied any illicit drug intake and there is no significant past medical or family history. Sertraline was stopped and replaced by duloxetine, but unfortunately the hyperpigmentation persisted. Only one previous case of sertraline-induced hyperpigmentation was found.

Keywords: Sertraline, anti-depressant, SSRI, hyperpigmentation **Abbreviations:** ICD- International Classification of Diseases

Introduction:

Sertraline is selective serotonin reuptake inhibitor (SSRI). It is a commonly prescribed antidepressant. The common side effects of SSRI's are nausea, vomiting, diarrhoea, dyspepsia, anorexia and weight loss.

To our knowledge this is the only second reported case of sertraline-induced hyperpigmentation. It is interesting to note that in some cases sertraline has been used as replacement medication following antidepressant induced hyperpigmentation. So it is important that both clinicians and patients are aware of this potential rare side effect of sertraline.

Case Report:

In this case report we present a 27 years old Caucasian lady that developed hyper pigmentation, after starting sertraline.

The patient, a 27 years old lady was diagnosed with Bipolar Affective Disorder (ICD-10)2 years ago. She was prescribed sertraline 50mg for low mood. Her current medications also include semi sodium valproate 1000 mg orally daily, quetiapine modified release 400 mg orally daily, tramadol 50mg orally twice a day and co-codomol orally on an as required basis for back pain. She was not prescribed any depot medications. To our knowledge she was compliant with her medication.

She responded well but reported that she had developed hyperpigmentation after four weeks. This persisted after suffering a recurrence of low mood and being seen in clinic 5 months later.

There is no significant past medical or family history. She has been on various psychotropic medications in the past including fluoxetine, venlafaxine, olanzapine and procyclidine.

Physical examination revealed focal hyperpigmentation limited to the upper lip. It was dark brown in color with sharply defined outline and was not associated with itching, redness, rash or excoriation. It was gradually getting darker in color and she had to wear a lot of make up to conceal it. The patient was referred to a consultant dermatologist for an opinion but unfortunately she did not attend her appointment. This has been acknowledged as a limitation of our case report. Routine blood tests were within the normal range. She also reported some weight gain with sertraline.

She did not report any previous history of dermatological disorders or any endocrine conditions and Addison's disease was excluded. She did not begin any new medication or vaccines prior to onset of the hyperpigmentation and denied ever having chlorpromazine, tricyclics, tetracyclines, amiodarone, hormone replacement therapy, aspirin, chemotherapy or minocycline. However three years ago, she had taken anti-malarial medication before going to the Dominican Republic. She also denied any intake of herbal medication, non-prescribed medication or illicit drugs.

She also denied excessive exposure to sunlight during the time of development of hyperpigmentation and she was not pregnant. There is no history of heavy metal exposure.

The probability of adverse drug reaction assessed by using Naranjo Scale indicated a probable association between the use of sertraline and hyperpigmentation. Subsequently her sertraline was stopped and replaced by duloxetine 30mg daily. Unfortunately the hyperpigmentation persisted after three off sertraline but is no longer worsening.

Discussion:

Bipolar Affective Disorder also known as bipolar disorder, manic-depressive disorder, or manic depression is characterised by two or more episodes in which patients mood and functionality is significantly disturbed, this disturbance on some occasions includes episodes of mania or hypomania with

elevated mood and increased energy levels and on others episodes of depression with low mood, tiredness and diminished pleasure in activities. Recovery is usually complete between these episodes. ¹

The pharmacological treatment of bipolar affective disorder depends on nature and degree of presenting episode and includes mood stabilisers like lithium, valproate, carbamazepine and lamotrigine, anti-psychotics like olanzapine, quetiapine, aripiprazole and risperidone and antidepressants like sertraline, citalopram and venlafaxine.

Sertraline, citalopram, escitalopram, fluoxetine, fluoxamine and paroxetine selectively inhibits reuptake of serotonin, hence named selective serotonin reuptake inhibitor (SSRI).

In our case the patient was on semi sodium valproate and modified release quetiapine and was later prescribed sertraline to help with low mood.

A literature review of English language using PubMed database was done on 15th June 2013. The terms searched were "sertraline", "serotonin reuptake inhibitor", "SSRI", "antidepressants", "hyperpigmentation", "pigmentation", and it found reports of antidepressant associated case hyperpigmentation with citalopram², mirtazapine³ and imipramine. 4,5,6,7 It is interesting to note that in some of the case reports the antidepressants were replaced by sertraline after development of hyperpigmentation, but there was no record as to whether the lesion resolved.2, 3,4

Only one previous case of sertraline-induced hyperpigmentation was found⁸, which also unfortunately persisted after discontinuation of the antidepressant.

As hyperpigmentation has also been reported with other SSRIs, clinicians should be more aware that hyperpigmentation might be related to the class effect, rather than the individual drugs.

Though the exact biological mechanism for the development of hyperpigmentation is not clear and further research is needed, the secretion of melanocyte stimulating hormone (a-MSH) is closely associated with skin pigmentation and serotonin and dopamine transmitters appear to be involved which may point to a possible mechanism for the hyperpigmentation.

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Competing Interests

None declared

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