STEVENS-JOHNSON SYNDROME IN A SCHIZOPHRENIC PATIENT TREATED WITH CARBAMAZEPINE
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SUMMARY
A female schizophrenic patient who developed Stevens-Johnson syndrome following carbamazepine treatment is reported. This life threatening condition is discussed in context of other adverse effects of the drug, reportedly found to be higher in frequency in the psychiatric population.

The use of carbamazepine in psychiatry is mostly in the prophylaxis of bipolar affective disorder (Greist, 1990) but often schizophrenics are benefited as their excitement and aggression responds to it (Luchins, 1984). The milder and commonly occurring adverse effects of carbamazepine are nausea, dizziness, ataxia, blurring of vision and skin rashes, but rarely severe conditions like Stevens-Johnson syndrome also occur (Fawcett, 1987). This life threatening adverse effect is an acute inflammatory polymorphic skin disease; this has multiple other causes also and its etiology is not clear.

The principal sign of the disease is a symmetrical distribution of grouped or isolated crops of violaceous papules, macules or nodules of 0.5 to 1 cm with a dome shaped surface. The lesions enlarge and become purpurish. In addition to it, there may be vesicles, bullae, papules, urticarial lesions and hemorrhagic sites. A rather characteristic lesion is erythema iris, also described as “bull’s eye” or “target lesion”. These are concentric erythematous rings with central clearing. The lesions may be present anywhere on the body but extensor surfaces are commonly involved. Mucous membrane ulceration is also a common finding.

The disease may occur as a primary skin disorder or as a skin manifestation of systemic infections, malignant or chronic disease of internal organs or as a reaction to ingested drugs like sulphonamides, penicillins, phenytoin and phenylbutazone (Rees & Rees, 1984; Fawcett, 1987). Carbamazepine, mostly used as an antiepileptic, has also been rarely known to cause it (Fawcett, 1987). The following case report describes a schizophrenic patient who developed this condition solely due to carbamazepine.

CASE REPORT
Mrs. M.C., a 32 year old female was admitted with a three year history of mental illness, characterized by abusiveness, aggressiveness, muttering to self, poor personal care, weight loss, appetite loss and reduction in sleep. After a thorough psychiatric evaluation, diagnosis of chronic schizophrenia, unspecified subtype was established. During her hospitalization, she was treated with different neuroleptics, one after another because she did not respond well to any of them and was finally treated with pimozide. The dose of pimozide was increased from 2 mg/day to 24 mg/day in a three month period. However, impulsivity remained an unresolved problem and carbamazepine 200 mg twice daily was added. On the 17th day after starting carbamazepine therapy, she developed fever, headache and myalgia; however no medicines for pyrexia were given. In the next 24 hours, she developed erythematous rashes on the extensor surfaces of limbs. After one day, bullous eruptions of the oral mucosa were marked and maculopapular rashes were present all over the body, except on the face. Purulent conjunctivitis developed bilaterally, although bullous eruptions were absent. The condition was treated by stopping carbamazepine and adding oral prednisolone (120 mg/day in tapering dosage) and parenteral Gentamicin 80 mg twice daily. Within a week, severe ulceration of the oral mucosa was seen. Hemorrhagic crusting and a grayish white membrane were visible on the lips and inner oral cavity. The skin lesions showed typical “target lesions” with necrotized central area and yellowish red swollen margins, spread all over the body, except the face. No bullous lesions over the skin were seen. After 4 weeks, the mucosal and skin lesions started subsiding; the eyes were the first to clear and no sequelae were evident.

Laboratory investigations including complete blood counts, hepatic and pancreatic enzymes were within normal limits. Urinalysis did not show any significant finding.

DISCUSSION
After millions of prescriptions of carbamazepine, mostly as an antiepileptic, there are only a few reported cases of Stevens-Johnson syndrome due to this drug. It is of interest to observe this condition in a schizophrenic patient treated with carbamazepine, because it is very infrequently used for this purpose. To the best of our knowledge, there is only one reported case of Stevens-Johnson syndrome where the drug was given for psychiatric illness (Fawcett, 1987). The diagnosis was consistent with the clinical description given in standard dermatology text books. In the absence of any other systemic or local infection or exposure to another drug in the recent past except pimozide, and with the fact that condition improved with the discontinuation of carbamazepine, suggests that the condition was perhaps caused by carbamazepine.

The studies on carbamazepine in psychiatry done so far, have mostly reported on its efficacy in different mental disorders; its adverse effects in psychiatric patients have found little attention. The belief that adverse effects in psychiatric patients are as frequent as in neurological patients is not true. In a study by Elphick (1988), the incidence of skin rash in psychiatric patients (12%-15%) was much higher than neurological patients.
(upto 5%), while they were on similar doses of carbamazepine. Similarly, the observation about the rarity of Stevens-Johnson syndrome in neurological patients while on carbamazepine treatment may not prove true for the psychiatric population. The occurrence of life threatening conditions like one described above, whatever be it’s frequency, is a reminder that carbamazepine treatment carries potential risk. In clinical conditions like schizophrenia, the marginal benefits of carbamazepine are to be weighed against disastrous side effects before starting the therapy.

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