## CHLOROQUINE-INDUCED TOXIC EPIDERMAL NECROLYSIS

### Puneet Bhargava, C M Kuldeep, N K Mathur

Two female patients aged 25 and 12 years suffering from malaria presented with picture of Stevens Johnson syndrome. Each of them had received daily doses of chloroquine phosphate by intramuscular injection for 3 days. They progressed to toxic epidermal necrolysis and could not be saved despite best of efforts.

Key Words: Chloroquine, Stevens Johnson syndrome, Toxic epidermal necrolysis

#### Introduction

Malaria is endemic in our country. Chloroquine still remains the mainstay of the treatment of malaria. Toxic and allergic reactions to this commonly used drug include pigmentation, photosensitivity, exacerbation of psoriasis, lichenoid eruptions, erythema annulare centrifugum, toxic psychosis and retinopathy. Toxic epidermal necrolysis (TEN) is a rare fatal drug reaction characterised by painful, erythematous epidermal separation. We report 2 cases of TEN occurring due to chloroquine phosphate.

# Case Reports

Case 1: A 25-year-old Hindu woman presented with severe orogenital ulcerations, bilateral conjunctivitis and erythematous maculopapular and urticarial lesions all over the body. Her pulse was 120/min and temperature 39°C. Past history revealed that she had been given daily doses of intramuscular chloroquine phosphate injections for 3 days for malaria. On fourth day she started developing erythematous rash which progressed to give rise to the present picture. She was admitted and put on steroids with antibiotic coverage and supportive care, but she developed extensive tender, confluent

erythematous peeling and blistering of the skin more on neck, chest and thighs. She could not be saved in spite of best efforts.

Case 2: A 12-year-old Hindu girl was admitted with severe oral ulcerations, bilateral conjunctivitis and extensive erythema multiforme like lesions. She too had received daily doses of injectable chloroquine phosphate for 3 days for malaria and on fourth day she developed these lesions. She was also put on steroids under antibiotic cover with supportive therapy, but she developed continuous separation of skin which ultimately proved fatal.

### Discussion

Toxic epidermal necrolysis represents one of the most severe forms of cutaneous drug reactions where mortality varies from 20-30%.2 Chloroquine is a commonly used drug in our country both for prophylaxis and therapy of malaria. There are isolated reports3,4 of TEN occurring after oral chloroquine intake but this drug has not yet been added to the expanding list of drugs capable of causing TEN. Aim of reporting these cases is to make physicians aware that fatal reactions like TEN can occur with common drug like chloroquine in susceptible individuals. Another fact which comes to light is that Stevens Johnson syndrome and TEN represent a continuous spectrum with TEN representing the most severe form.

From the Department of Dermatology, SMS Medical College, Jaipur, India.

Address correspondence to : Dr N K Mathur C-24, Peeyush Path, Bapu Nagar, Jaipur-302015.

## References

- Breathnach SM, Hintner H. Antimalarials and antihelminthic drugs. In: Adverse drug reactions and the skin. Oxford: Blackwell, 1992: 174-5.
- Breathnach SM, Hintner H. Toxic epidermal necrolysis. In: Adverse drug reactions and the skin. Oxford: Blackwell,1992: 64-71.
- Kanwar AJ, Singh OP. Drug induced toxic epidermal necrolysis. Ind J Dermatol 1978; 21: 73-7.
- Boffa MJ, Cholmers RJG. Toxic epidermal necrolysis due to chloroquine phosphate. Br J Dermatol 1994; 131: 444-5.