

## **Rabies post-exposure prophylaxis: a retrospective cross-sectional study**

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### Background

The aim of the study was to analyse demographics, travel history, exposure characteristics, and management in patients requiring rPEP.

### Methods

Retrospective cross-sectional study included patients who received rPEP between 1 September 2022 and 31 October 2024 after injuries in rabies-endemic regions.

### Results

A total of 117 patients were included (median age 31 years; IQR 22–40; male-to-female ratio 0.63:1). Comorbidities were present in 36 (30.7%), most commonly allergies (17; 14.5%). Exposures occurred mainly in Southeast Asia (41; 35.0%), the Middle East (30; 25.6%), and Europe (16; 13.7%), predominantly during tourism (94; 80.3%). Injuries were caused by dogs (54; 46.2%), cats (29; 24.8%), and monkeys (26; 22.2%); 77 (65.8%) were WHO category 3.

Among 81 patients treated abroad (WHO category 3: 55; category 2: 26), rPEP was initiated in 74 (91.4%), but only 11 received RIG. Antibiotic prophylaxis was administered to 30 patients; three received aciclovir or valaciclovir. After return, 45 (38.5%) required RIG. Pre-travel rabies vaccination was documented in nine (7.7%), requiring only two booster doses. The Essen protocol was used in 98 (83.8%) and the Zagreb protocol in 10 (8.5%). No severe adverse reactions were observed.

### Conclusions

Pre-travel counselling and vaccination uptake remain insufficient. Although rPEP initiation abroad was high, RIG access was limited. Improving availability, and targeted education is essential. Further research should assess barriers to RIG access and the impact of provider education.