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Australian bat lyssavirus and the long shadow of rabies: lessons from the History of Medicine

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Dear Editor,
the recent article on Australian bat lyssavirus (ABLV) published in *The Lancet Infectious Diseases* offers a timely reminder that even the rarest zoonotic infections may carry outsized clinical and societal consequences [1]. Members of the Lyssavirus genus share a defining biological feature: once neurological symptoms appear, the disease course is almost invariably fatal, regardless of the specific viral species involved. This is a biological constant rather than a statistical curiosity. Rarity, in this context, has never been a safeguard against lethality. Classical rabies virus, though now infrequent in many high-income settings, continues to exert a singular hold on medicine and public imagination alike - not because of its incidence, but because of its lethality. This distinction, often blurred in retrospective commentary, matters clinically. The same biological logic underlies concern for ABLV and other non-rabies lyssaviruses, despite their far lower documented burden in humans. In this respect, the historical lesson remains strikingly consistent. When Louis Pasteur administered his experimental vaccine to Joseph Meister in July 1885, the act was less one of scientific bravado than of clinical necessity: in lyssavirus disease, delay meant death, and prophylaxis could not wait for certainty [2]. That calculus has not fundamentally changed.

Against this backdrop, the recent ABLV case discussed by the authors would benefit from more explicit detail regarding the timing and completeness of post-exposure prophylaxis, details that are not ancillary, as such information is central to interpreting both individual outcomes and broader public health implications.

More than a century later, the World Health Organization's 2018 position paper reaffirmed the same principle in cooler prose: that timely and complete post-exposure prophylaxis remains the decisive factor in preventing the otherwise inexorable course of disease caused by classical rabies virus. While this framework is broadly extended to other lyssaviruses, including emerging zoonotic variants, the WHO also acknowledges differences in epidemiology, reservoirs, and reported human infections among non-rabies lyssaviruses. Nevertheless, in the absence of any curative therapy once clinical symptoms appear, prevention – rather than treatment – remains the only true medical victory against rabies and its viral relatives [3]. This point is easily stated, but it is not trivial.

Placed against this historical backdrop, the report of prophylaxis not preventing disease in the recent ABLV case deserves careful consideration. As details on the exact timing and completeness of administration are not provided, it would be

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premature to draw firm conclusions. Indeed, without such granularity, interpretation risks drifting from evidence to inference. The broader lesson, consistently reaffirmed by both historical experience and current guidance, is that post-exposure prophylaxis can be highly effective when given in full and without delay. Clear communication of this point remains important to sustain confidence in a preventive measure that has saved countless lives.

The epidemiological challenge of ABLV surveillance – fleeting viral shedding, elusive carriers, waning antibodies – echoes older struggles. Europe's battle with fox rabies in the twentieth century and North America's belated recognition of raccoons as reservoirs in the 1970s remind us that wildlife vectors are rarely obvious and never static [4]. Moreover, rabies has always been exquisitely sensitive to human activity: frontiers have shifted with the movement of armies, the sprawl of cities, and the pressures of trade. Today, climate stress and habitat disruption are reshaping the behaviour of bats, increasing the likelihood of encounters with people [5]. The ecological stage may look different, the mechanism does not.

ABLV should therefore not be dismissed as an Australian curiosity but understood as a fresh chapter in a very old book. What appears rare may yet prove enduring, and the margin between vigilance and complacency is written not in statistics but, uncomfortably, in lives.

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Conflict of interest
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REFERENCES

[1] Lateef S. A rare case of rabies-like Australian bat lyssavirus infection. *Lancet Infect Dis*. 2025; 25: E498 doi: 10.1016/S1473-3099(25)00480-3.

[2] Pasteur L. Méthode pour prévenir la rage après morsure. Comptes Rendus de l'Académie des Sciences. 1885; 101: 765-772.

[3] World Health Organization. Rabies vaccines: WHO position paper. Wkly Epidemiol Rec. 2018; 93(16): 201-20. https://www.who.int/publications/i/item/who-wer9316, accessed October 6th, 2025.

[4] Fooks AR, Banyard AC, Horton DL, Johnson N, McElhinney LM, Jackson AC. Current status of rabies and prospects for elimination. *Lancet.* 2014; 384: 1389–99. doi: 10.1016/S0140-6736(13)62707-5.

[5] Banyard AC, Evans JS, Luo TR, Fooks AR. Lyssaviruses and bats: emergence and zoonotic threat. *Viruses*. 2014; 6: 2974–2990. doi: 10.3390/v6082974.