



## Hydrophobia of human rabies

Juliana R Tongavelona, Rivo Andry Rakotoarivelo, Fy S Andriamandimby

### ► To cite this version:

Juliana R Tongavelona, Rivo Andry Rakotoarivelo, Fy S Andriamandimby. Hydrophobia of human rabies. Clinical Case Reports, 2018, 6 (12), pp.2519-2520. 10.1002/ccr3.1846 . pasteur-01968298

**HAL Id: pasteur-01968298**

**<https://riip.hal.science/pasteur-01968298>**

Submitted on 2 Jan 2019

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



Distributed under a Creative Commons Attribution - NonCommercial - NoDerivatives 4.0 International License

CLINICAL VIDEO

# Hydrophobia of human rabies

Juliana R. Tongavelona<sup>1</sup>  | Rivo Andry Rakotoarivelo<sup>2</sup> | Fy S. Andriamandimby<sup>3</sup>

<sup>1</sup>Infectious Diseases, Université d'Antananarivo Faculté de Médecine, Antananarivo, Madagascar

<sup>2</sup>Infectious Diseases, Université de Fianarantsoa, Fianarantsoa, Madagascar

<sup>3</sup>Institut Pasteur de Madagascar, Virology, Antananarivo, Madagascar

## Correspondence

Juliana R. Tongavelona, Centre Hospitalier Universitaire Befelatanana, Antananarivo, Madagascar.  
Email: tongavelona@gmail.com

## Key Clinical Message

Hydrophobia is a clinical sign characteristic of human rabies. This sign occurs following paroxysmal contractions of pharynx responsible for hydrophobic spasms.

## KEYWORDS

human rabies, hydrophobia

A 49-year-old man presented to the infectious disease ward, with hydrophobia allowing us to suspect human rabies. He has been bitten to the big toe by a dog 2 months prior to his hospitalization. He would have received a local wound care immediately after exposure. He also received only one dose of rabies postexposure vaccine by ID route 1-week aftermath.<sup>1</sup>

During the physical examination, the patient was conscious and polypneic at 34 bpm and tachycardia at 105 pulses/min. The body temperature was 37°C, and the blood pressure was 100/70 mm Hg. He was found to have aerophobia. He also complained of intense thirst, but any attempt of water intake caused hydrophobic spasm, described as a blockage in the throat with worsening of dyspnea, and he systematically repelled the glass of water (Video S1). The patient died the day of his admission. Rabies diagnosis was confirmed by direct fluorescent antibody test (DFAT) using postmortem brain samples (Figure 1).

The patient did not receive the four doses of rabies postexposure vaccine recommended by World Health Organization.<sup>1</sup>

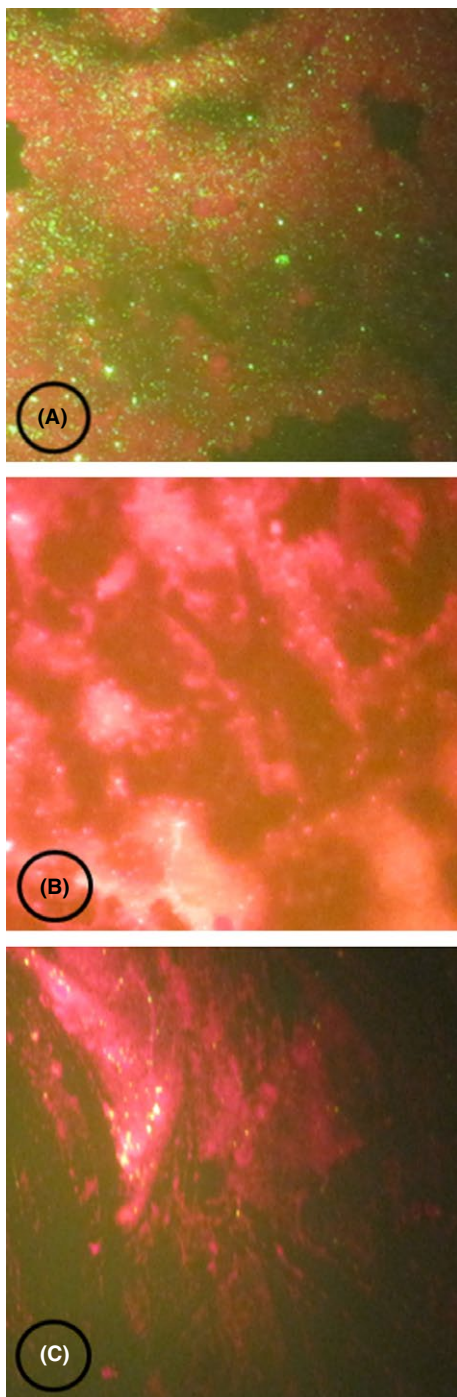
Hydrophobia is characteristic of furious rabies. Other classical features of rabies are fluctuating consciousness, modified mental state, aerophobia, phobic or inspiratory spasms, and autonomous stimulation signals. Death occurs usually 5.7 days on patients showing furious rabies after the first symptoms.<sup>2</sup>

## AUTHOR CONTRIBUTIONS

RAR: conceived the original idea. FSA: confirmed the diagnosis by direct fluorescent antibody test. JRT: wrote the manuscript in consultation with RAR and FSA. All authors provided critical feedback and helped shape the manuscript.

## ORCID

Juliana R. Tongavelona  <http://orcid.org/0000-0002-4530-4118>



**FIGURE 1** Result of direct fluorescent antibody test detecting rabies nucleoprotein. A, Positive control. B, Negative control. C, Human case

## REFERENCES

1. GPV policy statement on vaccine quality. Geneva, Switzerland: World Health Organization; 1996 (WHO/VSQ/GEN/96.02).
2. Hemachudha T, Ugolini G, Wacharapluesadee S, Sungkarat W, Shuangshoti S, Laothamatas J. Human rabies: neuropathogenesis, diagnosis, and management. *Lancet Neurol*. 2013;12:498-513.

## SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section at the end of the article.

**How to cite this article:** Tongavelona JR, Rakotoarivelo RA, Andriamandimby FS. Hydrophobia of human rabies. *Clin Case Rep*. 2018;6:2519–2520. <https://doi.org/10.1002/ccr3.1846>