# Stroke or Stramonium?

•M. Colella<sup>1, 2</sup>, L. Strada<sup>1</sup>, M.Colucci<sup>1</sup>, D. Bianchini<sup>1</sup>, G. Ajmar<sup>1</sup>, M. Del Sette<sup>1</sup>

- •¹Department of Neurology, Galliera Hospital, Genova
- <sup>2</sup> U.O.S. Stroke Unit, Department of Neuroscience, AOU Polyclinic G. Martino, University of Messina (Messina)



#### INTRODUCTION

Ischemic stroke diagnosis should be precise and fast, in order to initiate intravenous thrombolysis within 4.5 hours of symptom onset. However, this might occasionally lead to treat non-vascular disorders that may have clinical features resembling stroke. These conditions are usually defined as "stroke mimics". We report a case of an unusual stroke mimic.

#### **CASE REPORT**

A 64-years-old woman arrived to the Emergency Room of our Hospital for acute onset of dysarthria, slight impairment of consciousness and ataxia (NIHSS 4).

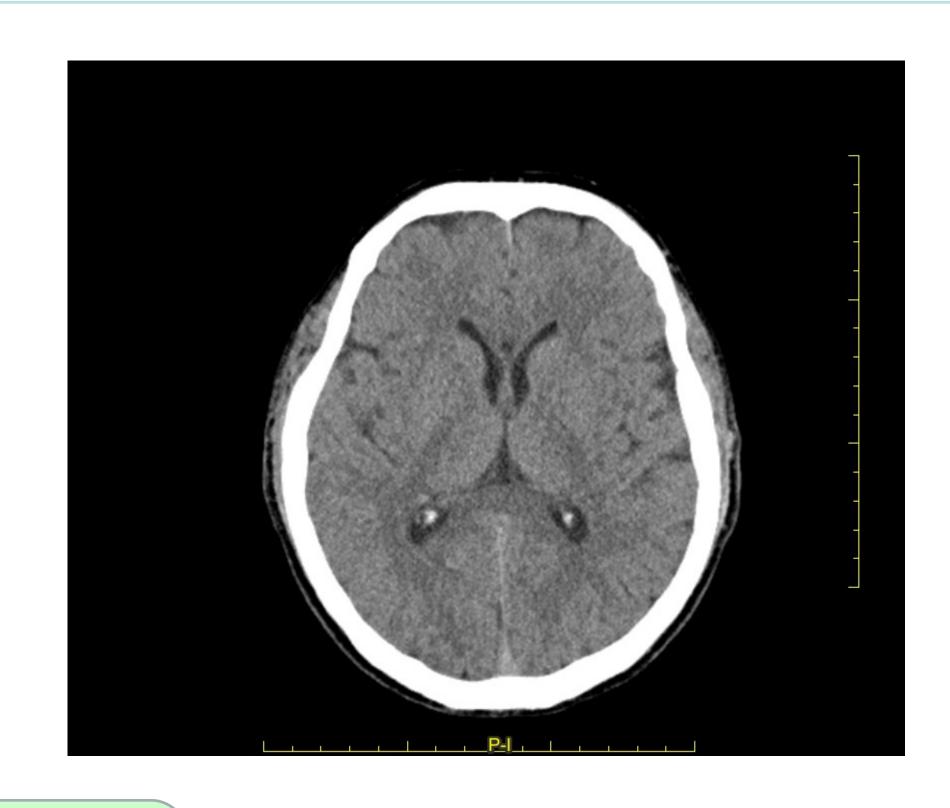
She underwent a brain CT scan and CT- angiography (CTA). No early signs of ischemia, nor major artery occlusion were present; she was treated with r-TPA i.v within two hours of symptom onset.

The 24-hours neurological examination showed significant clinical improvement with residual mild dysarthria, but the patient started suffering visual symptoms, reported as "seeing the water flowing on the wall"

Two days later, two friends of our patient were admitted to a different Hospital in serious conditions for Datura Stramonium poisoning. They had ingested an unwilling "poisoned omelette" prepared by our patient with wild herbs collected in the countryside. Our patient, then, reported to have had a little bit of the same wild herb the same day of hospital admission.

In the following days our patient showed the complete regression of symptoms. She was discharged with a diagnosis of Datura Stramonium intoxication.





### CONCLUSION

Datura stramonium is a hallucinogenic plant, which contains, atropine, hyoscyamine and scopolamine, which may induce symptoms like delirium, seizures, mydriasis, blurred vision, dry mouth and mucous membranes, extreme thirst, tachycardia, nausea and vomiting, difficulties in swallowing and speaking, hyperthermia, loss of consciousness and coma. Some of these symptoms can mimic a stroke, namely dysarthria, dysphagia and impairment of consciousness, that can resemble a vertebrobasilar stroke. According to the literature, the use of intravenous thrombolysis appears to be safe in stroke mimics. Outcome of these patients is generally favorable and intracranial hemorrhage is less frequent than in patients with ischemic stroke. The benefit of thrombolysis in case of ischemic stroke in selected cases may outweigh the risks of treating a stroke mimic. The interest of our case is the reporting of a "new stroke mimic" that should be added to the list, and that confirmed the low hemorragic risk in these cases.

## References

•Stella L, Vitelli MR, Palazzo E, Oliva P, De Novellis V, Capuano A, Scafuro MA, Berrino L, Rossi F, Maione S.: Datura stramonium intake: a report on three cases. J Psychoactive Drugs. 2010 Dec;42(4):507-12.

•Tsivgoulis G, Zand R, Katsanos AH, Goyal N, Uchino K, Chang J, Dardiotis E1, Putaala J, Alexandrov AW, Malkoff MD, Alexandrov AV. Stroke. 2015 Safety of intravenous thrombolysis in stroke mimics: prospective 5-year study and comprehensive meta-analysis. May;46(5):1281-7.

•Zinkstok SM, Engelter ST, Gensicke H, Lyrer PA, Ringleb PA, Artto V, Putaala J, Haapaniemi E, Tatlisumak T, Chen Y, Leys D, Sarikaya H, Michel P, Odier C, Berrouschot J, Arnold M, Heldner MR, Zini A, Fioravanti V, Padjen V, Beslac-Bumbasirevic L, Pezzini A, Roos YB, Nederkoorn PJ:Safety of thrombolysis in stroke mimics: results from a multicenter cohort study. Stroke. 2013 Apr;44(4):1080-4. doi: 10.1161/STROKEAHA.111.000126.

