

Before A Diagnosis of Rowland Payne Syndrome is Made, Alternative Differential Diagnoses Must Be Ruled Out

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LETTER TO THE EDITOR

We read with interest the article by Nieporęcki, *et al.* about a woman with a history of breast cancer who developed Horner's syndrome, progressive dysarthria, dysphagia, sensory disturbances and complete paralysis of the left upper limb within three years [Nieporęcki, K. *et al.*, 2025]. Motor neuron disease (MND) was suspected, but examination of the clinical picture revealed a diagnosis of Rowland-Payne syndrome (RPS) due to bone and pleural metastases of breast cancer [Nieporęcki, K. *et al.*, 2025]. Several points should be discussed.

The first point is that RPS should not be categorized as atypical motor neuron disease (MND), as mentioned in the introduction [Nieporęcki, K. *et al.*, 2025]. RPS typically involves not only motor but also autonomic and sensory fibers, which is usually not the case in MND. RPS is a plexopathy involving the lower cranial nerves.

The second problem is that the index patient had features of RPS that were not described in the original observation by Payne *et al.* in 1981 [Payne, C. M., 1981]. These include, in particular, complete flaccid paralysis of the muscles of the left upper limb and exaggerated palatal and pharyngeal reflexes. There is no evidence of upper motor neuron involvement either in the original description of the syndrome or in later reports of RPS [Murone, A.-J. B. *et al.*, 2014; Kapoor, V. *et al.*, 2005]. RPS may manifest with weakness of an upper limb, but complete paralysis has not been reported to date. Moreover, the patient had only one of the three main manifestations of RPS (Horner's syndrome, phrenic nerve palsy, shoulder pain with Dejerine-Klumpke syndrome (inferior plexus lesion)) [Payne, C. M., 1981].

Thirdly, it is incomprehensible that a recurrence of the malignancy was not detected until three years after the neurological abnormalities occurred. With a history of breast cancer, recurrence of

malignancy should be considered earlier than three years. Neurological symptoms and signs are often the first manifestation of recurrence when the CNS or PNS is affected by a malignant tumor. Has the patient attended regular check-ups with the oncologist?

The fourth point is that the CSF examinations were not reported in detail [Nieporęcki, K. *et al.*, 2025]. We should know whether or not there was pleocytosis, elevated CSF protein, elevated lactate, signs of malignancy, and whether or not neurotropic viruses were present.

The fifth point is that no follow-up was reported [Nieporęcki, K. *et al.*, 2025]. What therapy the oncologist used (resection of metastases, gamma knife, radiotherapy, chemotherapy, immunotherapy or hormone therapy), whether this treatment was effective, whether the neurological symptoms and signs partially or completely disappeared or worsened, whether new neurological symptoms and signs appeared or whether the patient died.

The sixth point is that it is not clear why the infiltration of the plexus was not already visualized on the MRI of the cervical spine. Was a contrast agent administered or were the proximal parts of the plexus not visualized on the MRI of the spinal cord?

The seventh point is the discrepancy between the age given in the case description (64 years) and Table 1 (60 years) [Nieporęcki, K. *et al.*, 2025]. This discrepancy should be clarified.

It is also incomprehensible why flaccid paralysis, dysarthria and dysphagia should be atypical for MND, as mentioned in the case description [Nieporęcki, K. *et al.*, 2025]. These are classic manifestations of amyotrophic lateral sclerosis. It should also be clarified whether the metastasis has infiltrated the left carotid artery or not.

In summary, the report has some inconsistencies that need to be clarified in order to assess whether the index patient actually had RPS, a paraneoplastic syndrome or a plexopathy involving the autonomic fibers and cranial nerve 10.

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