

Title

ED - Treating Patients with Sodium Nitrite Poisoning

Reference Number: RDF2238-24

Date of Response: 31/01/24

Further to your Freedom of Information Act request, please find the Trust's response(s) below:

Please be aware that the Royal Devon University Healthcare NHS Foundation Trust (Royal Devon) has existed since 1st April 2022 following the integration of the Northern Devon Healthcare NHS Trust (known as Northern Services) and the Royal Devon and Exeter NHS Foundation Trust (known as Eastern Services).

1) Are A&E clinicians and nurses employed by the Royal Devon University Healthcare NHS Foundation Trust trained to recognise the symptoms of sodium nitrite poisoning?

Eastern Service response: Yes. Emergency Medicine training and the team are trained to clinically assess toxidromes of a large variety including sodium nitrite poisoning. In addition, it would be standard practice to access and use guidance from the NPIS (National Poisons Information Service) Toxbase database in real time when clinically assessing and treating such patients.

Northern Service response: Regarding medical staff – poisons and antidote medical knowledge is held by senior ED staff and on EM curriculum. All ED staff should be equipped to identify the sick patient – in these case cyanosis, hypoxia and altered level of consciousness and from history identify sodium nitrite poisoning as the potential cause. Toxbase is available for emergency poisons advice and NDDH ED retains easy login through EPIC. The National Poisons Centre can be contacted for ongoing clinical advice in severe cases.

2) Are A&E clinicians and nurses employed by the Royal Devon University Healthcare NHS Foundation Trust trained to treat patients suffering with sodium nitrite poisoning with the antidote methylthionium chloride commonly called methylene blue?

Eastern Service response: Yes. Emergency Medicine training and the team are trained to clinically treat toxidromes of a large variety including sodium nitrite poisoning. In addition, it would be standard practice to access and use guidance from the NPIS (National Poisons Information Service) Toxbase database in real time when clinically assessing and treating such patients.

Northern Service response: Methylene blue dosing is available in the BNF for those unfamiliar with its dosing and administration. It is weight-based and given intravenously. It can be given in repeated doses. Formal training is not routinely given for administering this drug – however it is not a complex administration.

3) Does the A&E department at the Royal Devon University Healthcare NHS Foundation Trust routinely carry the antidote methylthioninium chloride commonly called methylene blue?

Eastern Service response: It is not currently carried within ED although it is available for ED use 24/7. There is a regional protocol for access to less common antidotes. Most of which are stored onsite at RDUH.

Northern Service response: Yes, methylthioninium chloride is in the antidote cupboard in resus – we stock x5 50mgs/10mls ampoules (x1 box). The initial dose is 1-2mgs/kg dose, then the same over 30 – 60 minutes so we stock enough to manage a patient. The instructions on how to give are on medusa which all staff have access to. Pharmacy advised that at RDUH Northern Services we are compliant with the Royal College of Emergency Medicine antidote guidelines (September 2023 update – see attached) for the holding of methylene blue. It is held in ED Resus antidote cupboard for immediate availability and a further supply is held in pharmacy to replenish ED. In the event of a further supply required out of hours, the on-call pharmacist would come into supply – this may take up to an hour depending on where they live.