

PARAQUAT TOXICITY

Meeting at CTL, 8 September 1978

Present : Dr. A Calderbank
Dr D M Foulkes
Dr J K Howard
Dr M S Rose
Dr P Slade

A PARAQUAT POISONING

There was agreement on the following points :

- 1 2-3g of PQ ion is the lethal dose for adults.
- 2 30 ml of concentrate (6g of ion) is an easily swallowed mouthful. A thirsty person gulping from a bottle could easily swallow 50 ml or more.
- 3 Treatment (Fuller's Earth etc) is not effective with doses greater than 6g.
- 4 Treatment can be effective when ~~very~~ low doses of Gramoxone (<6g) (or 1-2 sachets of Weedol) are swallowed.
for treatment to be effective The gut must be cleared of paraquat within 12 hr of swallowing.

Additional points :

- 5 Fitzgerald (Ireland) has published on ineffectiveness of treatment and will be publishing more.
- 6 JKH will :
 - a) Separate out Weedol from Gramoxone in his list of cases and efficacy of treatment.
 - b) Analyse data in Cavalli/Fletcher paper.
 - c) Check on availability of blood analysis from past cases.
- 7 JKH said the poisoning cases showed much Gramoxone is being used illegally in urban situations. He will supply a summary of evidence. Should legal action be taken ? Should we ask the ministry to tighten controls on Gramoxone ?

PS TO CONSIDER ACTION

B EMETIC

Poisonings in Western Samoa from January 77 - May 78 do not appear to show any lowered mortality since the introduction of the emetic (July 1977). However, it was agreed that it is too early to draw firm conclusions since we lack positive evidence that the emetic formulation has been drunk.

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Arrangements for monitoring :

(i) Western Samoa

The hospital had not agreed to send urine samples as earlier believed (the system was supposed to have been set up in July). A freight agent has now been engaged to do the job (D Brown, ICI NZ is going to W Samoa soon and will emphasise again the importance of the exercise to ICI) and we have been assured that urine samples from poisoning cases will now be sent. (How much money have we/will we contribute?) *Z. [Signature]*

(ii) UK

Guys Hospital have set up a collaborative exercise between 15 regional hospitals, to which it is hoped paraquat poisoning cases will be referred. Guys and CTL will be checking for presence of emetic, Guys will measure blood and urine paraquats. A meeting on October 20 will set up the procedure, which should be in operation by December 1978.

C DILUTE FORMULATION

There is a case for introducing a more dilute formulation (say 50g/l) in selected markets unless the emetic has a larger than expected effect on suicides. A suitable place for a test market could be W Samoa.

PS TO CONSIDER ACTION

PS/JMR
12.9.78