D TG 1090/16

E15

[redacted]

LOOSE MINUTE

PT:/TG 1090/16/DMD/206/90

16.8.90

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DCDS
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OP GRANBY - MEDICAL ASPECTS OF BW

1. I was requested to attend a meeting at CAMR by [redacted] DMSD as there Military Technical Advisor.

Present were:

[redacted] (Anthrax only)
DMSD OP
DMED

2. The purpose of the meeting was to discuss the availability of vaccines and immune sera.

3. DMSD were satisfied with the contents of the meeting and I have been instructed to present the technical side of the above meeting to the Med Ops and Plans O Group at DMSD on Friday 17 Aug 90.

4. The presentation I intent to make is in outline at Annex A. I have discussed the contents with [redacted] acting Superintendent DMD.

[redacted]

[redacted] Colonel L/RAMC

[redacted]

SD/4490

Annex A to PTA/1090/16/DMD/ /90 of 16 Aug 90

ANTHRAX PROPHYLAXIS

1. The current vaccine manufactured at CAMR consisting of a 0.5 ml dose at 0 3 6 and 32 weeks does not offer full protection against all the strains of anthrax. The protection that is given does not reach its peak until after the fourth dose at 32 weeks. However protection also depends on the exposure dosage and for lower doses is acceptable after the third dose at 6 weeks.

2. The efficacy of the vaccine can be enhanced by the simultaneous administration of a licensed Whooping Cough Vaccine or an unlicensed adjuvant subject to availability of these items.There is animal evidence that protection is not only enhanced but extended by these combinations to include the so called "Vaccine resistant strains".

3. The efficacy can be further be increased by giving a double dose of 1 ml which would cause more pain and discomfort.

4. The opinion of the meeting was that option 2 would significantly reduce the numbers and severity of casualties.

5. Supply: (a) 6400 doses are immediately available. 15000 doses could be available at the end of Sept 1990.

(b) Additional doses would require vaccine production to be rescheduled. A run of experimental Whooping Cough Vaccine would have to be postponed with the approval of DoH.

(c) Production on each batch of approximately 10000 doses would in the first instance take 14 - 15 weeks from start and then batches could be produced every 2 weeks. That is 10000 doses available at 15 weeks, 10000 at 17 weeks, 10000 at 19 weeks etc. Fill could be multidose vials or single dose ampoules.

(d) To speed up this process Licence Variation or even Crown Privilege would need to be sought.

6. Should option 2 be agreed this would also provide a unique opportunity to obtain human data on the efficacy of the Whooping Cough/Anthrax Combination.

E14

[redacted]

BOTULINUM TOXOID

7. No UK vaccine is available. CAMR have experience in manufacturing the toxoid for strain ABE and F. The latter currently as a US DoD contract for whom the currently hold stocks of F toxoid. C and D are veterinary strains and would need to acquired probably from the Commonwealth Laboratory in Australia.

8. The vaccine is effective in protecting against the strains included which in this case should be ABCDE and F if possible.

9. CAMR could produce such a vaccine subject to obtaining high yield C and D strains in 9 months at an approximate cost of 500 to 600K. It would be necessary to invoke Crown Privilege.

HUMAN IMMUNE GLOBULIN (BOTULINUM ABCDE) (HYPERIMMUNE PLASMA)

10. This material is not available in any quantities in UK.

11. Up to 50 people in CAMR and CDE have previously been vaccinated with BOT TOX and could donate plasma after receiving a booster dose.One litre of plasma could be obtained from each volunteer.

12. This should produce enough to protect the present number of personnel in the Gulf and depending on antitoxin levels and number volunteers probably many more. Detailed calculation and measurement of titre would be required to determine exactly how many doses would be available.

13. Protection would be for about 3 months and the volunteers could be bled several times at intervals to be determined - probably three monthly.

14. This hyperimmune plasma in liquid or freeze dried form would need to be given prior to exposure.

15. It is not a vaccine and would not replace the need for a vaccine.

[redacted]