

FALSE POSITIVE DIAGNOSIS OF RABIES

A dog which arrived in Australia from New Guinea early in February was diagnosed, while still in quarantine at Lytton (Brisbane), as suffering from heartworm. It was treated for this condition but died, a few days later, on 4 March 1978. Treatment for heartworm sometimes is fatal; not only is the drug itself toxic enough to kill some animals that are already sick, but portions of dead worm break off as emboli which can also kill. In this case emboli were found at post-mortem examination.

In accordance with routine practice when an animal dies in quarantine, samples of brain tissue were referred to the Commonwealth Serum Laboratories (CSL) in Melbourne for rabies testing. Fluorescent antibody tests on the brain were negative. However intra-cerebral inoculation of brain tissue into weaning and suckling mice produced signs of rabies, and deaths after 6 days. The brains of the dead mice were positive to fluorescent antibody testing.

Quarantine action was initiated immediately, and human contacts of the dog in Brisbane commenced on a course of rabies vaccine. All dogs and a cat released from quarantine since the arrival of the dead animal were returned to quarantine and human contacts of the dog in Brisbane commenced on a course of rabies vaccine.

In the meantime, tests were repeated on the second half of the brain. Fluorescent antibody tests were again negative, and mice inoculated with brain material showed no signs of rabies after 28 days observation, and after F.A. examination. Careful consideration of the procedures used during the first tests indicated the strong possibility of a false positive result caused by contamination of the first half of the brain. This is not an uncommon problem in the handling of viruses.

Australia is one of the few countries in the world that is free of rabies. This is no doubt due to strict quarantine practice. The quarantine requirements vary according to country of origin, but in the case of cats and dogs arriving from Papua and New Guinea, a 9-month quarantine is imposed.

FOETAL VACCINIA - CASE REPORT (contributed by the staff of I.C.P. & M.R. Sydney)

The isolation vaccinia reported in Bulletin 78/7 is of interest. A woman was vaccinated against smallpox at 8 weeks gestation. At 24 weeks gestation she was delivered of a live 500 mg infant which survived for 1 hour. Multiple vaccinial-like lesions were present on the skin and at post-mortem lesions were found in the lung and placenta.

Vaccinia virus was isolated from the skin lesions and the lung. (The placenta was put into formalin.)

The reasons for the vaccination have not been ascertained

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to date, but the case re-emphasises the dangers inherent in smallpox vaccination of pregnant women.

S. AUREUS FOOD POISONING - CASE REPORT (contributed by
Dr W.G. Murrell, CSIRO Division of Food Research, North
Ryde, Sydney)

On 9 January 1978, one person who consumed fish paste from a freshly opened container became ill with vomiting, frothy bile and severe pain after approximately one hour. The sample was returned to the retail outlet and then submitted for testing on 13 January 1978, but remained unrefrigerated from the time it was opened.

Microbiological analysis of the sample gave the following results:

Standard plate count	30°C for 3 days	2.3 x 10 ⁸ /g
	20°C for 3 days	2.7 x 10 ⁸ /g
Anaerobe count	30°C for 3 days	1.0 x 10 ⁵ /g
Coagulase positive <u>S. aureus</u>		6 x 10 ⁶ /g
Faecal coliforms		10 ⁶ /g
<u>B. cereus</u> , <u>Cl. perfringens</u> and <u>Salmonellae</u> absent		

The probable aetiological agent was S. aureus, since no other pathogens were detected. The high count of this organism might, however, have been due to the period of time the sample remained unrefrigerated after opening.

Editor's note: Food poisoning cases associated with this type of product are uncommon in Australia. Proliferation of the toxigenic staphylococcus was most likely aided by the high salt content of the paste, and its storage on the shelf at room temperature in the retail outlet.

CHLORAMPHENICOL RESISTANCE IN SALMONELLA SPP (contributed by the
staff of Fairfield Hospital, Melbourne)

We have examined the antibiotic susceptibilities of 164 consecutively isolated strains of food-poisoning Salmonella spp. These were recovered from patients admitted to Fairfield Hospital since January 1977; only one, S. newport, was resistant to chloramphenicol (400 ug/ml); it was possibly acquired by the patient, a solicitor, during a visit to S-E Asia.

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

REPORTING PERIOD - 6 APRIL TO 19 APRIL 1978 BULLETIN NUMBER 78/S
 VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES

VIRUS OR VIRAL ANTIGEN	ICPMR (NSW)/ WVH (ACT)	RAHC (NSW)	PHH/ POW (NSW)	FAIR- FIELD (VIC)	RCH (VIC)	IMVS (SA)	STATE LAB (QLD)	STATE LAB (WA)	TOTAL
0100 ADENOVIRUS NOT TYPED.....	2	-	-	1	-	-	2	2	7
0101 ADENOVIRUS TYPE 1.....	-	-	-	-	-	-	-	1	1
0102 ADENOVIRUS TYPE 2.....	-	-	1	-	-	-	-	3	4
0103 ADENOVIRUS TYPE 3.....	-	-	-	-	-	3	-	1	4
0105 ADENOVIRUS TYPE 5.....	-	-	-	-	-	-	-	2	2
0107 ADENOVIRUS TYPE 7.....	-	-	-	-	-	1	-	1	2
0108 ADENOVIRUS TYPE 8.....	-	-	-	-	-	-	-	1	1
0119 ADENOVIRUS TYPE 19.....	-	-	-	-	-	-	-	3	3
0199 ADENOVIRUS TYPING PENDING.....	-	-	-	-	2	-	-	-	2
0201 INFLUENZA A VIRUS.....	2	-	-	-	-	-	-	-	2
0203 INFLUENZA B VIRUS.....	-	-	-	1	-	-	-	-	1
0204 INFLUENZA C VIRUS.....	-	-	-	-	-	-	2	-	2
0301 PARAINFLUENZA VIRUS TYPE 1.....	-	-	-	-	-	-	-	2	2
0302 PARAINFLUENZA VIRUS TYPE 2.....	-	-	-	2	-	-	1	2	5
0303 PARAINFLUENZA VIRUS TYPE 3.....	-	-	-	2	5	-	1	2	10
0500 RHINOVIRUS (ALL TYPES).....	-	-	-	8	2	-	-	1	11
0600 MYCOPLASMA PNEUMONIAE.....	15	-	-	11	-	3	1	1	31
0700 ORNITHOSIS-PSITTACOSIS.....	1	-	-	1	-	-	-	2	4
0816 COXSACKIEVIRUS A16.....	-	-	-	1	-	-	-	1	2
0901 COXSACKIEVIRUS B1.....	1	-	-	-	1	1	2	1	6
0902 COXSACKIEVIRUS B2.....	-	-	-	-	1	1	-	1	3
0903 COXSACKIEVIRUS B3.....	-	2	-	-	-	-	-	-	2
0905 COXSACKIEVIRUS B5.....	-	-	-	-	-	-	-	1	1
1000 ECHOVIRUS NOT TYPED.....	-	-	-	-	-	-	9	-	9
1005 ECHOVIRUS TYPE 5.....	-	-	-	-	-	-	-	1	1
1007 ECHOVIRUS TYPE 7.....	-	-	-	4	1	-	-	-	5
1009 ECHOVIRUS TYPE 9.....	-	-	-	5	-	-	-	1	6
1011 ECHOVIRUS TYPE 11.....	-	-	1	-	-	1	-	-	2
1014 ECHOVIRUS TYPE 14.....	1	-	1	-	-	-	1	-	3
1015 ECHOVIRUS TYPE 15.....	-	-	-	1	-	-	-	-	1
1017 ECHOVIRUS TYPE 17.....	-	-	1	-	-	-	-	1	2
1018 ECHOVIRUS TYPE 18.....	4	-	-	-	-	-	-	-	4
1019 ECHOVIRUS TYPE 19.....	-	-	5	3	-	1	-	-	9
1022 ECHOVIRUS TYPE 22.....	-	-	3	-	6	2	1	-	12
1023 ECHOVIRUS TYPE 23.....	-	-	1	-	-	-	-	-	1

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REPORTING PERIOD - 6 APRIL TO 19 APRIL 1978 BULLETIN NUMBER 78/8
 VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES - CONTINUED

VIRUS OR VIRAL ANTIGEN	ICPMR	RAHC	PHH/	FAIR-	RCH	IMVS	STATE	STATE	TOTAL
	(NSW)/ WVH (ACT)	(NSW)	POW (NSW)	FIELD (VIC)	(VIC)	(SA)	LAB (QLD)	LAB (WA)	
1025 ECHOVIRUS TYPE 25.....	1	-	-	-	-	-	-	-	1
1027 ECHOVIRUS TYPE 27.....	-	-	1	-	-	-	-	-	1
1030 ECHOVIRUS TYPE 30.....	-	-	-	6	-	-	-	-	6
1101 POLIOVIRUS TYPE 1.....	-	-	-	-	1	-	1	-	2
1103 POLIOVIRUS TYPE 3.....	-	-	-	-	-	1	2	-	3
1200 MUMPS VIRUS.....	3	-	-	2	-	1	3	1	10
1300 HERPES VIRUS GROUP-NOT TYPED.....	3	-	-	1	-	3	-	-	7
1301 HERPES SIMPLEX VIRUS-NOT TYPED.....	1	-	6	2	2	-	22	2	35
1302 EPSTEIN-BARR VIRUS (EB VIRUS).....	-	-	-	-	-	3	-	-	3
1303 VARICELLA-ZOSTER VIRUS.....	-	-	-	-	-	2	1	-	3
1306 HERPES SIMPLEX TYPE 1.....	7	-	-	7	-	3	-	6	23
1307 HERPES SIMPLEX TYPE 2.....	21	-	-	9	-	14	-	19	63
1401 COXIELLA BURNETI.....	10	-	-	1	-	1	19	-	31
1502 PICORNA VIRUS-NOT TYPED.....	-	-	-	-	-	-	-	2	2
1512 VACCINIA VIRUS.....	1	-	-	-	-	-	-	-	1
1530 HEPATITIS A VIRUS.....	2	-	-	-	-	-	-	-	2
1532 HEPATITIS B ANTIGEN.....	-	-	15	23	-	3	8	6	55
1533 HEPATITIS B ANTIBODY.....	-	-	-	-	-	13	-	9	22
1541 TRIC - TRACHOMA-INCLUSION CONJUNCTIVITIS.....	-	-	-	-	-	2	-	14	16
1556 CMV - CYTOMEGALOVIRUS.....	4	-	-	3	-	4	3	5	19
1562 CORONAVIRUS.....	3	-	-	-	-	-	-	-	3
1564 ROTAVIRUS.....	-	-	-	2	-	3	-	1	6
1571 ENTEROVIRUS TYPE 71 (BRCR).....	-	-	-	2	-	-	-	-	2
1599 ENTEROVIRUS TYPING PENDING.....	6	-	-	-	6	5	-	-	17
TOTAL.....	88	2	35	98	27	71	79	96	496

ARBOVIRUS GROUP B 4..... 4
 ROSS RIVER VIRUS 16.. 2.. 18

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 VIRAL IDENTIFICATIONS CATEGORISED INTO SOURCE SPECIMENS - CONTINUED

VIRUS OR VIRAL ANTIGEN	FA	BL	NA	CS	SK	EY	UR	BR	GE	DT	TOTAL
1027 ECHOVIRUS TYPE 27.....	1	-	-	-	-	-	-	-	-	-	1
1030 ECHOVIRUS TYPE 30.....	1	-	5	1	-	-	-	-	-	-	7
1101 POLIOVIRUS TYPE 1.....	1	-	1	-	-	-	-	-	-	-	2
1103 POLIOVIRUS TYPE 3.....	2	-	-	-	-	-	-	-	-	1	3
1200 MUMPS VIRUS.....	-	7	2	1	-	-	-	-	-	-	10
1300 HERPES VIRUS GROUP-NOT TYPED.....	-	3	-	-	4	-	-	-	-	-	7
1301 HERPES SIMPLEX VIRUS-NOT TYPED.....	-	6	8	-	7	1	-	-	11	1	34
1302 EPSTEIN-BARR VIRUS (EB VIRUS).....	-	3	-	-	-	-	-	-	-	-	3
1303 VARICELLA-ZOSTER VIRUS.....	-	-	-	-	3	-	-	-	-	-	3
1306 HERPES SIMPLEX TYPE 1.....	-	-	11	-	5	1	-	-	5	-	22
1307 HERPES SIMPLEX TYPE 2.....	1	-	-	-	15	-	-	-	48	-	64
1401 COXIELLA BURNETI.....	-	30	-	1	-	-	-	-	-	-	31
1502 PICORNA VIRUS-NOT TYPED.....	2	-	-	-	-	-	-	-	-	-	2
1512 VACCINIA VIRUS.....	-	-	-	-	1	-	-	-	-	-	1
1530 HEPATITIS A VIRUS.....	2	-	-	-	-	-	-	-	-	-	2
1532 HEPATITIS B ANTIGEN.....	-	55	-	-	-	-	-	-	-	-	55
1533 HEPATITIS B ANTIBODY.....	-	22	-	-	-	-	-	-	-	-	22
1541 TRIC - TRACHOMA-INCLUSION CONJUNCTIVITIS.....	-	-	-	-	-	2	-	-	14	-	16
1556 CMV - CYTOMEGALOVIRUS.....	-	9	4	-	-	-	3	-	3	1	20
1562 CORONAVIRUS.....	3	-	-	-	-	-	-	-	-	-	3
1564 ROTAVIRUS.....	6	-	-	-	-	-	-	-	-	-	6
1571 ENTEROVIRUS TYPE 71 (BRCR).....	1	-	-	-	1	-	-	-	-	-	2
1599 ENTEROVIRUS TYPING PENDING.....	10	-	5	-	1	-	1	-	-	1	18
TOTAL.....	71	181	98	19	37	8	5	1	81	5	506

ARBOVIRUS GROUP B 3..... 3
 ROSS RIVER VIRUS 18..... 18