



Communicable Diseases Intelligence

Bulletin number 81/22

Issue date: 6 November 1981

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- . Foodborne outbreak due to marijuana consumption - California
- . Post-salmonella arthritis - UK

VIRUS REPORTING SCHEME - A total of 880 reports were received this period, although figures from one laboratory have not been received due to delays in the mail.

These reports include:

- . Dengue - Four further cases of indigenous dengue fever in north Queensland were reported by the State Health Laboratory, Brisbane. One case in a 54 year old female from Cairns was confirmed as dengue virus type 1 by the presence of specific IgM. The remaining three cases were classified as "probable dengue" since clinical symptoms included fever, rash and myalgia, but their IgM reacted against MVE virus as well as dengue virus type 1. There was no reaction against dengue virus types 2, 3 or 4. These cases included a 29 year old female from Innisfail, a 38 year old female from Chillagoe, (a mining town about 100 km inland from Cairns) and a 54 year old female from Cairns. All four cases had onset of illness in the first two weeks of September.

Dengue type 1 infection has now been confirmed by the Brisbane laboratory for one of the first series of serum specimens taken from patients involved in the "clinical dengue" outbreak on Thursday Island. A 32 year old male had specific IgM and an HI titre of $\gg 1/5120$ against group B arbovirus in a specimen taken on 29 October. Onset of illness was recorded as 13 October 1981.

- . SSPE has been diagnosed by the State Health Laboratory Services, Perth, in the four year old Aborigine girl from Groote Eylandt who presented with Australian encephalitis in March 1981 (see CDI 81/9). The girl had a serum CF antibody titre of $1/640$ and a CSF titre of $1/32$ against measles virus. It was reported that she had a measles rash at 11 months of age.
- . Encephalitis - Specific IgM against rubella virus was detected by the State Health Laboratory, Brisbane, in a 16 year old male presenting with meningoencephalitis. This rare complication of rubella occurs in approximately one of 5000 cases, principally in adults. In addition, antibody against Epstein-Barr virus was identified by the Institute of Clinical Pathology and Medical Research, Sydney, in a seven year old girl presenting with encephalitis and

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HEALTH HAZARDS OF PET EXCRETA

(Contributed by C.R. Boughton, Division of Infectious Diseases, Prince Henry Hospital, Sydney, and G.H. Collins, Department of Veterinary Pathology, University of Sydney).

As a follow-up to the article printed in CDI 81/20 on Toxocara species and Toxoplasma gondii which may be transmitted to man via excreta of pets, the ova of Echinococcus granulosus from dogs should be appended for Australian conditions.⁽¹⁾

Hydatid disease is usually thought to be confined to rural areas where dogs might be fed uncooked offal from animals slaughtered on private properties. However studies have suggested that there is an additional risk of infection in urban settings as a result of the retail sale from abattoirs and knackeries of uncooked offal for pet food. Surveys of dogs have indicated prevalences of infestation varying from 0%(2,3) to 3.8%(4) in metropolitan Sydney, and 3.4%(5) to 6%(6) in Melbourne. In one survey conducted in Sydney, a prevalence of 14% was determined for dogs either housed on abattoir premises or owned by the workers⁽⁷⁾. This suggested surreptitious feeding of the animals with uncooked offal.

Apart from two findings of calcified cysts in horses indicating abortive infections, the equine strains of E. granulosus have not been recognized in Australia. Although in Victoria, the word "knackery" is reserved for premises engaged only in the slaughter of horses, in New South Wales the term covers all premises that dispose of diseased or decrepit animals, and consequently has to be coupled with abattoirs where the sale of offal is concerned.

Whether offal meats have been inspected prior to packaging or not, they should be cooked before being fed to dogs to destroy any undetected hydatid cysts or scolices. An infected dog in an urban community has the potential to infect not only the owner, but also every human it comes in contact with. A five weekly administration of a cesticide such as "Droncit" may prevent the dog shedding ova, but is unlikely to successfully eradicate the parasite.

References

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FOODBORNE OUTBREAK DUE TO MARIJUANA CONSUMPTION - CALIFORNIA
(Based on California Morbidity (1981) No 40).

In July 1981, the San Bernardino County Health Department was notified about a possible foodborne outbreak associated with a "pot-luck" brunch served at a local college office party. Of the nine people who reported symptoms, five were aged 40 years or older. Symptoms included dry mouth (all 9 cases), dizziness (7), tachycardia (5), blurred vision (5), memory lapse (5), tingling (3), anxiety (3), confusion and/or drowsiness (3),

nausea (1) and headache (1). Three were hospitalised for overnight observation. The incubation period ranged from 50 minutes to two hours, and the median duration of illness was three hours.

Food histories implicated "zucchini cake", and the symptoms suggested an intoxication. The woman who prepared the cake reported that she was under the influence of alcohol during its creation, and that she might have "possibly put marijuana into it". Laboratory tests confirmed the presence of cannabinoids in the implicated cake, but quantitation was not done. No legal action was undertaken, since no charges were filed.

Marijuana (AKA cannabis and "hashish") is generally smoked by those who desire its pharmacological effects, when they are experienced within a few minutes but do not persist. If ingested, 30 minutes to one hour may elapse before the drug takes effect, and symptoms can last as long as three to five hours. Symptoms include tachycardia, slight rise in blood pressure, conjunctival injection, dry mouth and throat, urinary frequency without diuresis, and a marked increase in appetite (especially for sweets). The subjective effects depend not only on the personality of the user, but also on the dose, the route of administration and the specific circumstances at the time the drug is used. The most common reaction is a dreamy state of altered consciousness in which ideas seem disconnected, uncontrolled and flow freely. Things long forgotten are remembered, and things that should be well known cannot be recalled. Time perception is disturbed; seconds seem like minutes, minutes like hours. Space perception may be altered so that near objects seem distant. With larger doses, vivid hallucinations may be experienced. There may be an uplifting alteration of mood and uncontrollable laughter with minimal stimulation. With very large doses panic states and fear of death have occurred; body image may be distorted with the head feeling swollen and the extremities heavy. A sufficient high dose in a predisposed personality may cause a toxic psychosis. With prolonged use, study subjects become indolent, unproductive and neglect personal hygiene.

POST-SALMONELLA ARTHRITIS (PSA) - UK.
(Based on CDS (1981) 81/31)

In October-November 1979, an outbreak of salmonellosis attributed to infected milk occurred in the village of Mauchline, Ayrshire in Scotland. S. typhimurium phage type 110 was isolated from 17 patients and S. typhimurium phage type 193 from two⁽¹⁾. A retrospective survey was undertaken approximately one year later to establish whether any of these patients suffered locomotor symptoms either at the time of their acute illness or later. Three of the 15 patients contacted described joint pains. The symptoms in two were attributed to degenerative joint disease, but the third presented with symptoms suggestive of post-salmonella arthritis. This 26 year old male developed pain in his knees associated with a mild urethritis about four weeks after onset of his diarrhoeal illness. The urethritis remitted spontaneously in one week, but the joint pains persisted for about one year. There were no signs of residual inflammatory arthritis at the time of examination.

Although an uncommon complication, PSA may follow a bout of salmonella enteritis^(2,3,4), and because of the time interval between the original infection and the onset of arthritis and the often relatively mild symptoms, the condition may easily be

missed by the medical practitioner and ignored by the patient. The incidence of PSA following S. typhimurium infections has been reported to be 2.5%⁽⁵⁾, with an equal sex ratio and an age distribution of 10-50 years. Aseptic sero-negative reactive arthritis has also been reported following shigella⁽⁶⁾, yersinia^(7,8) campylobacter⁽⁹⁾ and Clostridium difficile⁽¹⁰⁾ infections.

Arthritis occurs usually two to three weeks after onset of infection, and is generally polyarticular. The most commonly affected joints are the knees and ankles, with the wrists, hands, feet and cervical spine less frequently involved. The articular features consist of pain and swelling with occasional redness, warmth and effusion, usually associated with fever. Other features of Reiter's syndrome such as conjunctivitis, iritis or urethritis may be present. The condition is self-limiting, lasting up to six months, and resolving without sequelae. Treatment is mainly symptomatic with analgesic and anti-inflammatory drugs and appropriate physical measures.

PSA should not be confused with salmonella arthritis due to direct infection of a joint or joints, when the organism may be isolated from culture of joint aspirate and early treatment with appropriate antibiotic is essential. In PSA, the organism may be recovered from the stool but not from synovial fluid. Joint radiology is usually normal. An increased frequency of the tissue type antigen HLA B.27 suggests a genetic predisposition to the condition which may be explained in terms of a genetically determined aberrant response to the invading organism.

References

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glandular fever. The neurological complication of infectious mononucleosis is reported to occur in less than 1% of cases, but it can predominate the clinical presentation (see also CDI 81/21).

- . Seven of the hepatitis A virus reports from the State Health Laboratory Services, Perth, were of a nosocomial outbreak among staff members at Derby Hospital. The index case was a male who had been nursed in a paediatric ward in September. All the present cases were either connected with children in that ward or were sharing residential accommodation.

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

1

REPORTING PERIOD - 15/10/81 - 28/10/81 BULLETIN NUMBER
 VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES

81/22

VIRUS OR VIRAL ANTIGEN	ICPMR (NSW)/ WVH (ACT)	PAHC (NSW)	PHR/ POW (NSW)	FAIR- FIELD (VIC)	RCH (VIC)	IMVS (SA)	STATE LAB (QLD)	STATE LAB (WA)	Total	
0100 ADENOVIRUS NOT TYPED.....	8			4			4	6	2	24
0101 ADENOVIRUS TYPE 1.....	3						1			6
0102 ADENOVIRUS TYPE 2.....				2			1		1	4
0104 ADENOVIRUS TYPE 4.....				1						1
0105 ADENOVIRUS TYPE 5.....	5						4			9
0106 ADENOVIRUS TYPE 6.....							1			1
0107 ADENOVIRUS TYPE 7.....							1			1
0119 ADENOVIRUS TYPE 19.....					1				3	4
0199 ADENOVIRUS TYPING PENDING.....							1			1
0201 INFLUENZA A VIRUS.....	4			2	1		3	4		14
0203 INFLUENZA B VIRUS.....	5	1					1			7
0301 PARAINFLUENZA VIRUS TYPE 1.....								1	1	2
0302 PARAINFLUENZA VIRUS TYPE 2.....									1	1
0303 PARAINFLUENZA VIRUS TYPE 3.....	1	1			1		4	2	1	10
0399 PARAINFLUENZA VIRUS TYPING PENDING.....							1			1
0400 RESPIRATORY SYNCYTIAL VIRUS (RS)...	4	7		1			7	1	4	24
0500 RHINOVIRUS (ALL TYPES).....	3	1					2	2		13
0600 MYCOPLASMA PNEUMONIAE.....	2			5	2		3	3	3	18
0700 ORNITHOSIS-PSITTACOSIS.....	2			2	1					5
0904 COXSACKIEVIRUS B4.....	2									2
0905 COXSACKIEVIRUS B5.....							2	1		3
1009 ECHOVIRUS TYPE 9.....									1	1
1014 ECHOVIRUS TYPE 14.....	1								1	2
1023 ECHOVIRUS TYPE 23.....									1	1
1030 ECHOVIRUS TYPE 30.....									2	2
1102 POLIOVIRUS TYPE 2.....							2			2
1103 POLIOVIRUS TYPE 3.....							1			1
1104 POLIOVIRUS-VACCINAL STRAIN.....	3			1						4
1199 POLIOVIRUS TYPING PENDING.....							1			1
1200 MUMPS VIRUS.....	7				5			1	4	17
1300 HERPES VIRUS GROUP-NOT TYPED.....	18			5	4		2	1		30
1301 HERPES SIMPLEX VIRUS NOT-TYPED.....		2			5				37	44

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

REPORTING PERIOD - 15/10/81 - 28/10/81 BULLETIN NUMBER
 VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES-CONTINUED

2

81/22

VIRUS OR VIRAL ANTIGEN	ICPMR (NSW) WVH (ACT)	PAHC (NSW)	PHH/ POW (NSW)	FAIR- FIELD (VIC)	RCH (VIC)	IMVS (SA)	STATE LAB (QLD)	STATE LAB (WA)	Total
1302 EPSTEIN-BARR VIRUS (EB VIRUS).....	5					6		2	13
1303 VARICELLA-ZOSTER VIRUS.....	1		5			3	2		11
1306 HERPES SIMPLEX TYPE 1.....	6		4	14		6	21		51
1307 HERPES SIMPLEX TYPE 2.....	47		9	25		6	20		107
1399 HERPES VIRUS TYPING PENDING.....				2		6			8
1401 COXIELLA BURNETII.....	9			1		3	12		25
1502 PICORNA VIRUS-NOT TYPED.....							1		1
1521 MEASLES VIRUS.....	7	1	6	1		2	1		18
1522 RUBELLA VIRUS.....	5			17		2	16	2	42
1532 HEPATITIS B ANTIGEN.....	4		8	40		21	6	9	88
1535 HEPATITIS A ANTIBODY.....	2	2	2	32		3	4	14	59
1541 CHLAMYDIA A - C. TRACHOMATIS.....	14		8					44	66
1556 CMV - CYTOMEGALOVIRUS.....	4		12	16		5	5	16	58
1563 CORONAVIRUS.....				1					1
1564 POTAVIRUS.....	14	12	18			12			56
1599 ENTEROVIRUS TYPING PENDING.....			2			1			3
POSS FIVEE VIRUS							4		4
ASTROVIRUS	7								7
SMALL VIRUS (LIKE) PARTICLE	1			1					2
DENGUE							1		1
ARPO. GROUP B.							3		3
Total.....	194	27	97	177		118	118	149	880

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

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PERIOD : 15/10/81 to 28/10/81

81/22

Viral identifications by Clinical Information Table 1.

Code 00,99 -No ill or data; 01,02,11,12 -Respiratory; E3 -Encephalitis; M3 -Meningitis; 04 -Paralysis; 05,13 -CNS other unspec.;

07,49 -GI; 17,47 -Hepatic; 19 -CVS; 89 -Urinary; 06 -Skin/mucous.-CONTINUED

VIRUS OR VIRAL ANTIGEN	No-ill or data	Respiratory	Encephalitis	Meningitis	Paralysis	CNS other unspec	GI	Hepatic	CVS	Urinary	Skin/mucous memb
1303 VARICELLA-ZOSTER VIRUS.....	2			1							8
1306 HERPES SIMPLEX TYPE 1.....	4	2	1					1		2	22
1307 HERPES SIMPLEX TYPE 2.....	2										5
1401 COXIELLA BURNETI.....	8		1				1	1			
1502 PICORNA VIRUS-NOT TYPED.....					1						
1521 MEASLES VIRUS.....	5	3	1								8
1522 RUBELLA VIRUS.....	3		1	1							38
1532 HEPATITIS B ANTIGEN.....	31							56		1	
1535 HEPATITIS A ANTIBODY.....	2							57			
1541 CHLAMYDIA A - C TRACHOMATIS...		1									
1556 CMV - CYTOMEGALOVIRUS.....	13	7				1	2	2		8	
1563 CORONAVIRUS.....							1				
1564 ROTAVIRUS.....	1						55				
ASTROVIRUS							7				
SMALL VIRUS (LIKE) PARTICLE							2				
ARBO. GROUP B.											2
Total.....	91	93	5	8		1	90	117	4	11	113

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

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81/22.

PERIOD : 15 / 10 / 81 to 28 / 10 / 81 ...
 Viral Identifications by Clinical Information Table 2.
 Code 10 -Eye; 59 -Genital; 39 -Endo/sal gland;
 38 -RES; 29 -Muscle/joint; 69 -Congenital; P8 -PUO;
 G8 -Fever/malaise; 09 -Other; A1 -SIDS ...

VIRUS OR VIRAL ANTIGEN	Eye	Gen-ital	Endo/sal gland	EBS	Muscle /joint	Con-genital	PUO	Fever /mal-aise	Other	SIDS
0101 ADENOVIRUS TYPE 1.....								1		
0102 ADENOVIRUS TYPE 2.....								1		
0119 ADENOVIRUS TYPE 19.....	2	2								
0201 INFLUENZA A VIRUS.....	1						1	2		
0203 INFLUENZA B VIRUS.....							1			
0301 PARAINFLUENZA VIRUS TYPE 1....			1					1		
0303 PARAINFLUENZA VIRUS TYPE 3....	1			1			1			
0400 RESPIRATORY SYNCYTIAL VIRUS (RS).....										1
0600 MYCOPLASMA PNEUMONIAE.....								2	1	
0905 COXSACKIEVIRUS B5.....							1			1
1030 ECHOVIRUS TYPE 30.....							2			
1200 MUMPS VIRUS.....			11					1		
1301 HERPES SIMPLEX VIRUS NOT-TYPED	1	15						1	1	
1302 EPSTEIN-BARR VIRUS (EB VIRUS).			2	4					3	
1306 HERPES SIMPLEX TYPE 1.....		19					1	2		
1307 HERPES SIMPLEX TYPE 2.....		99	1							
1401 COXIELLA BURNETT.....							3	12		
1521 MEASLES VIRUS.....			1				1	1		
1522 RUBELLA VIRUS.....					4					
1541 CHLAMYDIA A - C TRACHOMATIS...		65								
1556 CMV - CYTOMEGALOVIRUS.....	2	14		2	1	1	4	2	3	
BOSS RIVER VIRUS					4					
DENGUE					1					
ARBO. GROUP B. ...					2					
Total.....	7	214	16	7	12	1	15	26	9	1