

Dear Doctor,

Case definitions of renal diseases associated with consumption of melamine tainted milk products (MTMP)

As of 16 October, there were eight cases of renal stones in children suspected to be related to the consumption of melamine tainted milk products (MTMP) in Hong Kong. As stated in our letter issued on September 18, 2008, a case was initially defined as "a child presenting with renal diseases including urinary calculi and with history of exposure to melamine containing dairy products" which is used for the surveillance purpose.

With evolving knowledge and accumulation of experience, the Treatment Subgroup of the Expert Group on Melamine Incident in October has decided that a set of more specific case definitions is required to assess the real burden of disease likely caused by MTMP while the above reporting criteria remains the same.

I would like to inform you about the case definitions which are shown as follows:

Suspected case (懷疑病例)

Individuals having consumed food that is tainted with melamine (according to the lists of unsatisfactory/tainted foods promulgated by Centre for Food Safety, Hong Kong and/or AQSIQ#, China and/or other official agencies overseas);
AND either of the following conditions:-

Having a positive ultrasound finding of renal stone(s), sand or filtrated residues,*
where other potential causes have been excluded by differential diagnosis;

OR

Having a verified, positive history of passing renal stone(s), sand or filtrated residues, where other potential causes have been excluded by differential diagnosis.

Probable case (臨床病例)

A "suspected case" with melamine intake exceeding the tolerable daily intake threshold of 0.63 mg/kg for those over 36 months of age or 0.32 mg/kg body weight for those 36 months or younger**, for a significant duration.

Confirmed case (確診病例)

A "probable case" with laboratory confirmation.***

* Exact radiological criteria@ defining a positive ultrasound examination as per the Hospital Authority Expert Group on milk products tainted with melamine. if ultrasound was performed outside Hong Kong, a written report or ultrasound film should be available to confirm the finding.

@ Ultrasound criteria for reporting MTMP associated renal stone

(1) Ultrasonography is currently the preferred procedure for investigating MTMP associated renal stone. The criterion for reporting MTMP associated renal stone should be:

- Criterion 1: "A strong echogenic lesion \geq 4 mm lying inside the renal calyx or renal pelvis, detected by multi-lanar US scan (B-mode) using high frequency probe (5-10 MHz).", OR
- Criterion 2: "An ultrasonographic abnormality not completely fulfilling criterion 1" AND "dilatation of either renal pelvis or renal calyx."

(2) Hydronephrosis alone does not imply the presence of a renal stone.

(3) Lesion not completely fulfilling criterion 1 or 2 should be reported as an inconclusive US scan. It is recommended to follow up these patients with an interval scan in 1 -3 months' time subject to clinical judgment. In consideration of radiation exposure risk and the potential benefits, CT, MR and IVU of the kidneys are not advisable unless otherwise justified.

***According to Centre for Food Safety, Hong Kong, China.*

****Subject to further assessment of technical feasibility and scientific validity.*

#Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China

The above case definitions will be reviewed and may be updated from time to time as the knowledge of the disease is evolving.

You are kindly reminded to report cases to the Central Notification Office of the Centre for Health Protection (CHP) via fax (24772770), phone (24772772) or CENO On-line (www.chp.gov.hk/ceno).

In response to this incident, CHP has set up a hotline (2125 1133) to handle public's enquiry. The Hospital Authority has set up 18 designated clinics to provide assessment service to eligible persons of the age of 12 years or below who have consumed melamine-tainted milk products. You can find relevant information about melamine and related service provision on the website of the Centre for Health Protection:

http://www.chp.gov.hk/view_content.asp?lang=en&info_id=13990

Yours faithfully,



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