

EPIDEMIOLOGY UNIT

Ministry of Healthcare and Nutrition

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Report on the Workshop held at GH, Matale on Prevention and Control of Leptospirosis

As per the letter (Ref: Epid/383/1/2007) dated December 27, 2007 District General Hospital, Matale had been included into the surveillance system for leptospirosis. In this regard, a workshop was organized on January 29, 2008 at the GH, Matale for both curative and preventive health sector medical officers. At this workshop, following matters were emphasized/ discussed:

Inclusion of GH, Matale into the surveillance system

In 2007, there was a significant increase in the number of reported cases of leptospirosis from Matale district especially during the later part of the year. Out of 2194 cases notified in 2007, Matale reported 178 cases i.e. 8% of the total case load. Among the 12 MOH areas in Matale, large numbers were notified from Ukuwela, Rattota and Yatawatte. Since the beginning of 2008, while all other sentinel districts were showing declining trend, Matale district has reported 9,23 and 21 cases respectively during 1st, 2nd and 3rd week of January 2008. These facts justify the inclusion of GH, Matale as a sentinel hospital.

Clinical management

As the confirmatory investigation reports (e.g. MAT) will not be available during early part of illness, the diagnosis is mainly based on clinical and epidemiological evidence. It was stressed that the medical officers should aware about the local epidemiology and the varied clinical presentation of leptospirosis. It was mentioned, basic investigations such as WBC/DC (polymorpho-leucocytosis) and urine FR (albumin +) would assist in the differential diagnosis of leptospirosis with other acute febrile illnesses of viral origin.

Though most of the cases are self-limited, those who need advanced management should be transferred to larger institutions without delay to prevent mortality and to reduce complications. In this regard, the importance of organizing clinical management training

programmes periodically for medical officers of smaller institution with the support of Consultant Physicians was stressed. RDHS and MS/ GH, Matale will facilitate these training programmes in future.

All deaths suspected of due to leptospirosis need pathological postmortem in order to establish the cause of death. Samples (tissues) can be sent to the Molecular Biology Unit, University of Kelaniya for confirmation. In future, it was agreed to conduct leptospirosis mortality reviews with the participation of relevant curative and preventive health sector officials.

Laboratory investigation

Laboratory diagnosis facility (MAT) is available at the Medical Research Institute (MRI), Colombo. All specimens should be sent with a brief history of illness. Instructions could be obtained from the Microbiology Unit, MRI (Dr. P. Somaratne, Consultant Microbiologist, 011-2691350) or Microbiologists attached to the larger medical institutions.

In addition, PCR test for leptospirosis diagnosis is currently available at Molecular Biology Unit, University of Kelaniya. It was mentioned that the sensitivity and specificity of PCR is much higher than that of MAT and even the serovars (serotype) can be identified with PCR. As serovars are mostly host-specific, this diagnostic test will also help to identify the possible vector for the disease transmission. Presently, this test cost about Rs 2000 but according to Dr. Abeywickrama, Molecular Biology Unit it could be made available free, if a proper request is made with the endorsement of the Epidemiology Unit.

Prevention and control activities

Prevention and control activities for leptospirosis at district and divisional levels were discussed at length. It was stressed that the sentinel surveillance activities are not to substitute notification process. Notification process is very essential to forecast outbreaks and to facilitate early interventions and this should be continued.

The Epidemiology Unit has started receiving leptospirosis special investigation forms from GH, Matale. However, it was pointed out that the quality of those forms was not satisfactory. The main intention of collecting these forms was to get more information on clinical and laboratory findings and, disease transmission. Unfortunately, almost all the forms sent from

GH, Matale, lacked this information. The MS and the Consultants attached to GH, Matale suggested involving the Medical Officer/ Public Health in this activity.

The need for proper selection of high risk groups for prophylactic treatment during outbreaks was also discussed. As there was a concern about possible resistance to doxycyclin subsequent to widespread use, it was stressed that this activity should be carried out under direct supervision of MOOH upon receiving proper guidance.

A presentation was made on rodent control activities. Some studies suggest the source of infection may not only be the rats, but buffalos also. Therefore, the messages for the awareness programmes should be modified accordingly. The need for coordination with local government, agriculture, livestock, and irrigation sectors at district and divisional levels was also highlighted.

Action plan

The district officials agreed to prepare an action plan for prevention and control of leptospirosis including activities for clinical management, disease and laboratory surveillance, chemoprophylaxis, environmental measures, intersectoral coordination, health education and health promotion.

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**LEPTOSPIROSIS NOTIFICATION BY WEEK 2007
CENTRAL PROVINCE**

