

NOVEL H1N1 INFECTION : A NEW THREAT TO MANKIND?*

SEKHAR CHAKRABARTI** AND MAMTA CHAWLA SARKAR**

Influenza pandemics occur when an influenza virus from another animal or avian host cross the species barrier by changing its genetic make-up and infects human, resulting in worldwide spread of disease with high mortality. The viruses are named according to species the strain is endemic in or adapted to such as Bird flu, Swine flu etc. The 2009 flu pandemic is a global outbreak of a new influenza A virus subtype H1N1. Initially, it was named as Swine flu due to presence of genes from swine influenza virus. However, the term swine flu is misnomer since the virus was later found to be “quadruple reassortant” with genes from swine, human and avian viruses. The new virus has been found to be different from seasonal human influenza viruses in several aspects. Till date, real time PCR developed by CDC, USA is the only approved technology for diagnosis of novel H1N1. Other than being a sensitive and rapid test, this test also has an advantage of discriminating the novel H1N1 virus from seasonal influenza viruses. Neuraminidase inhibitor (Tamiflu) is the only choice of drug till date. Recently a new vaccine against the 2009 H1N1 has been approved in USA which are under clinical trials for safety and immunogenicity studies. In India , Ministry of Health and Family welfare has been proactive in combating situation and several laboratories have been accredited as diagnostic laboratories. Since this virus will automatically subside with time by virtue of viral dynamics, it is important we should tackle the situation rationally and be prepared to face further challenges for this new threat.
