Demographics, Clinical Presentation and Outcome of Metapneumovirus Infection in Adults: A Case Series Analysis at Scarborough General Hospital, UK

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Abstract:

Human metapneumovirus (hMPV), a leading cause of Acute Respiratory infection in humans was first identified in 2001 by scientists in Netherlands [1-3]. hMPV can cause upper and lower respiratory disease in people of all ages [4,5]. Approximately 90-100% of children are affected by hMPV between the ages of 5 to 10 as per seroprevalence studies [6-9]. Infection can reoccur within the elderly population and immunocompromised individuals [10,11]. Broader use of molecular diagnostic testing techniques like Polymerase Chain Reaction (PCR) has increased identification and awareness about this virus [1].

hMPV is a negative sense single stranded Ribonucleic Acid (RNA) Virus, part of Pneumoviridae family of viruses, similar to Respiratory syncytial virus (RSV) [1,3]. It can cause mild upper respiratory tract infection in healthy individuals with symptoms like cough, sore throat and fever [1,10]. hMPV is mostly spread from an infected person to healthy individuals through secretions from coughing and sneezing, close personal contact and fomites [1,12]. Thus, hMPV infection is more common in closed or shared accommodation, as was seen in the respiratory infection outbreak in two skilled nursing facilities in West Virginia and Idaho, during 2011–2012 [13]. Another retrospective survey for three northern hemisphere influenza seasons from 2010 to 2013, which included 590 care homes and 75 outbreaks, showed that 10 outbreaks out of 75 were caused by Parainfluenza, Human metapneumovirus or Respiratory syncytial virus [14].

Keywords:

Human Metapneumovirus, acute respiratory infection, Viral pneumonia, hMPV, Adults, Demographics, Treatment.