Life threatening infections labelled swine flu

Algorithms for remote diagnosis and issue of antiviral drugs are indispensable during a pandemic. Their application through the National Pandemic Flu Service to both high and low prevalence areas is, however, controversial, and the lack of specificity in the use of the algorithm has been highlighted by Payne et al and at November’s meeting of the Federation of Infection Societies in Birmingham.

Over six weeks (1 July 2009 to 15 August 2009) we reviewed cases of potentially life threatening conditions admitted to the Newcastle infection services in which diagnosis and management were delayed because of an initial, incorrect diagnosis of swine flu. During this time, rates of novel H1N1 swab positivity (22/336) suggested a local prevalence of 6.5% of patients presenting to hospital with a flu-like illness compared with 11.8% throughout England.

A label of swine flu resulted in an average diagnostic delay of three days in six adults and two children who were admitted with potentially life threatening infection requiring timely antimicrobials. They had instead meningococcal meningitis; severe (11% parasitaemia) and mild (0.2%) Plasmodium falciparum malaria complicated by renal failure; acute myeloblastic leukaemia presenting with febrile pancytopenia; Campylobacter gastroenteritis with renal failure; Haemophilus influenzae respiratory tract infection (bone marrow transplant recipient); complicated soft tissue infection; and a fatal Staphylococcus aureus bacteraemia with multiorgan failure.

Our results show that a concise history must cover travel, immunosuppression, and drug exposure comprehensively and that current local epidemiological data should influence the interpretation and application of algorithms. Algorithms do not replace comprehensive history taking, clinical acumen, laboratory support, and, above all, common sense.

Notes
Cite this as: BMJ 2010;340:c137

Footnotes

- Competing interests: None declared.

References