

# Co-infection with Influenza: Do Not Forget *Aspergillus* in the Immunosuppressed Neutropenic Host

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**To the editor:** We read the comprehensive grand rounds review by Chertow and Memoli<sup>1</sup> with great interest. The authors appropriately point out the frequent bacterial pulmonary co-infections following severe influenza. As immunosuppression is a well-known risk factor for complicating influenza<sup>2</sup>, we would like to point out the vulnerability of these patients not only to conventional bacterial super-infections (such as pneumonia due to *Staphylococcus aureus*, *Pneumococcal pneumoniae*, or gram negative rods), but also to opportunistic fungi, especially *Aspergillus* species. Although invasive pulmonary necrotizing aspergillosis has been described as a following influenza in apparently immunocompetent hosts<sup>3</sup>, single institution studies, encompassing the era before<sup>4</sup> and during the H1N1 influenza pandemic<sup>5</sup>, mostly point out the occurrence of invasive aspergillosis in hospitalized patients with hematologic cancer. The frequency of this post-influenza complication is not well captured in the existing literature but its implications are twofold in immunocompromised patients. First, increased awareness needs to be made for prompt diagnostic work up and pre-emptive antifungal therapy targeting invasive molds in patients with complicated influenza course

and suggestive radiologic findings (e.g., cavitary lesions, nodules, air-crescent sign). Second, although it has been limited in use by national health system<sup>6</sup> and not been studied specifically, intensifying antifungal prophylaxis with the use of mold-active triazoles and increased surveillance by non-culture based diagnostic tests, such as *Aspergillus* galactomannan, might have an impact for post-influenza invasive aspergillosis, a disease with historically high mortality rates.

## Conflicts of Interest

No potential conflict of interest relevant to this article was reported.

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