'The contrast may burn a little' - Case report of severe, anaphylactic shock following mri iv contrast

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We present a case of a 46-year-old male who developed acute onset shortness of breath, hypotension, and hypoxia soon after receiving IV contrast for a routine MRI scan. A portable Chest X-ray done revealed diffuse, bilateral infiltrates, similar to features of pulmonary edema or Acute Respiratory Distress Syndrome (ARDS). During his in-hospital stay, the patient was treated with High-flow nasal cannula oxygen, phenylephrine to support hemodynamic status as needed, a short course of hydrocortisone as well as nebulizers to assist shortness of breath. Gadolinium-based contrast agents are a useful adjunct in CT and MRI imaging. Adverse reactions to these contrast agents are rare (<2.5%). Only 0.01% of reactions will involve anaphylaxis, with potentially fatal consequences if not appropriately recognized and managed. Only 7 cases have been reported in the literature with immediate hypersensitivity reactions to Gadolinium-based contrast agents without symptoms of skin exanthemas and urticaria alongside symptoms of dyspnea. With the increased use of Gadolinium-based contrast agents, one should be aware of their life-threatening side effects that may present like this case. Strong consideration of contrast-agent as a trigger for such events should be held in patients with sudden, unexplained changes in hemodynamic status and respiratory failure with no other discernible cause post-contrast administration.