factors associated with PCP in the non-HIV immunocompromised population.

Methods Retrospective study of patients admitted to a large teaching hospital, diagnosed with PCP infection February 2018 to January 2023 inclusive. Those with HIV diagnosis were excluded.

Results 84 patients were identified. Median age was 67.5 years (IQR: 60 – 74.3). Diagnosis was confirmed via bronchoalveolar lavage (BAL) in 62/84 (73.8%), radiology in 17/84 (20.2%), sputum in 2/84 (2.4%) and information unavailable in 3/84 (3.6%).

30/84 (35.7%) required intensive care admission; of these, 7/30 (23.3%) required ventilatory support. Overall mortality was 29/84 (34.5%).

Table 1 summarises the underlying diagnoses and immunosuppressive medications associated with PCP infection. The greatest risk of PCP infection was with co-administration of immunosuppressive and glucocorticoid medication, particularly in haematological malignancy and solid organ transplant. Of these, patients with haematological malignancy received a median equivalent prednisolone dose of 40 mg; patients with solid organ transplant received a median equivalent prednisolone dose of 5 mg. For patients receiving glucocorticoid medication alone, the median equivalent prednisolone dose was 28 mg [IQR: 16 – 30]. In patients with underlying solid tumour, the greatest proportion received chemotherapy only. In patients with immune-mediated inflammatory diseases, methotrexate was the most common immunosuppressant medication associated with PCP infection.

19/55 (34.6%) were commenced on PCP prophylaxis on discharge.

Conclusions PCP infection in the non-HIV immunocompromised carries high mortality. The risk of PCP is greater with co-administration of immunosuppressive and glucocorticoid medication, particularly in haematological malignancy and solid organ transplant. Methotrexate is associated with risk of PCP infection in immune-mediated inflammatory diseases. The majority of non-HIV immunocompromised patients with PCP infection had underlying malignant disease. A third of patients were prescribed prophylaxis on discharge. Greater guidance should be considered to aid specialist decision making regarding primary prevention of PCP infection in non-HIV immunocompromised patients.

P85 CONTEMPORARY UNDERLYING CAUSES OF IMMUNOCOMpromise IN SEVERE PCP: A 10 YEAR TERTIARY-CENTRE EXPERIENCE


10.1136/thorax-2023-BTSabstracts.237

Introduction Pneumocystis jirovecii pneumonia (PCP) is a severe opportunistic fungal respiratory infection, typically occurring in immunocompromised individuals. PCP has historically been most associated with HIV, however there is a rising incidence in non-HIV PCP, with this cohort having a higher reported mortality.1 With increasing use of novel immunosuppressive agents, chemotherapy and immunomodulators, we may see an evolving demographic. Our aim was to establish common risk factors and diagnoses that predisposed to severe PCP requiring admission to an intensive care unit (ICU) in the UK over the last 10 years.

Methods A retrospective case-notes review was conducted, examining all admissions with confirmed PCP to all ICUs in Oxford University Hospitals (OUH) between 2011 and 2021. Demographic data; co-morbidities; and the presence of immunosuppression, chemotherapy, organ transplant, small-molecule inhibitor use or retroviral disease was extracted.

Results Twenty-nine patients received treatment for confirmed PCP infection Eight patients (8/29; 27.6%) had received chemotherapy within the last 6 months. Four (4/29; 13.8%) had received a bone marrow transplant in the preceding 12 months, whereas five (5/29; 17.2%) had received a solid organ transplant during their lifetime. Eighteen (18/29; 62.1%) of patients had documented use of immunosuppressive medications within the 6 months preceding admission to ICU. Eight patients were on methotrexate, nine were on high-dose steroid and four were on a monoclonal antibody. Only four patients (4/29; 13.8%) had a diagnosis of HIV, of which three had detectable viral load. Four (4/29; 13.7%) patients were on PCP prophylaxis at the time of hospital admission.

Discussion In a single centre co-located with a bone-marrow and solid-organ transplant service, the majority of patients requiring ICU admission for treatment of PCP had iatrogenic immunocompromise. Most established literature on PCP prevalence and outcome in critical care involves the HIV population. There is an evolving and expanding cohort of patients with PCP related to non-HIV immunosuppression. There is relatively little dedicated study in this cohort regarding PCP outcomes.

REFERENCES

Please refer to page A289 for declarations of interest related to this abstract.

P86 ADVERSE EVENTS AFTER ANTICOAGULATION IN COVID-19 POSITIVE INPATIENTS: A TRIPLE CYCLE AUDIT AGAINST NICE GUIDANCE NG191

1C Sechante, 1A Vassila, 5Shaikh, 1N San, 1H Launders, 1J Swabe, 1,2BMa r s h a l l , 1,2A Freeman. 1University Hospital Southampton, Southampton, UK; 2University of Southampton, Southampton, UK

10.1136/thorax-2023-BTSabstracts.238

Aims Several intra-abdominal bleeding events were reported in University Hospital Southampton (UHS) in COVID-19 positive inpatients on anticoagulation, when optimal thromboembolic prophylaxis was unknown, with national and local guidance changing frequently. The aim of this audit was to compare adherence to evolving NICE COVID-19 rapid guideline (NG191) in UHS, investigating adverse events, bleeding or thrombotic, and their adherence to guidelines.

Methods We conducted a retrospective three-cycle audit with data collected from electronic prescriptions of enoxaparin, for COVID-19 positive patients in UHS for: Jan 15th-Feb 13th2021 (Cycle 1–100 patients), Aug 29th-Sep 27th2021 (Cycle 2–122 patients) and Nov 15th-Dec 14th2021 (Cycle 3–87 patients). The 3 components of the audit cycle reflected changing dosing of prophylactic low-molecular weight heparin.

Results Against the NICE NG191 guideline, our audit demonstrated 94% adherence in Cycle 1, with 19 clotting events, 5