Unmasking HIV in a Case of Uncontrolled Asthma: A Diagnostic Journey

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Abstract

This case report highlights the diagnostic odyssey of Mr XX, 61 years old, a previously healthy ex-smoker, librarian presenting with worsening asthma symptoms. Despite conventional treatments, his condition persisted, leading to a cascade of investigations that ultimately revealed HIV infection.

Keywords: HIV, uncontrolled asthma, case report

Introduction

This case report highlights the diagnostic odyssey of Mr XX, 61 years old, a previously healthy ex-smoker, librarian presenting with worsening asthma symptoms. Despite conventional treatments, his condition persisted, leading to a cascade of investigations that ultimately revealed HIV infection.

Case presentation

Mr. XX asthma symptoms escalated since 2012, marked by frequent exacerbations and chest infections. Despite therapeutic adjustments, including salbutamol and Seretide inhalers, his condition remained refractory. Concurrent symptoms of weight loss and recurrent green phlegm raised suspicion for underlying pathology.

Investigations

Initial investigations, including blood tests and chest X-rays, yielded inconclusive results. However, a CT scan revealed an anterior mediastinal mass, later identified as adeno-squamous carcinoma of the thymus. Subsequent staging CT scans incidentally discovered a breast nodule and right hilar lymphadenopathy. Spirometry results were unremarkable, complicating the diagnostic process.

Diagnosis and Management

Multidisciplinary discussions culminated in surgical intervention for the thymoma, which led to the discovery of HIV infection. Further evaluation revealed co-infection with Pneumocystis pneumonia (PCP). Initiation of antiretroviral therapy and adjunctive treatment resulted in symptomatic improvement and disease control.

Discussion

This case underscores the importance of considering HIV infection in patients presenting with refractory asthma symptoms, especially in the context of suggestive clinical features and epidemiological risk factors. The diagnostic journey highlights the pivotal role of comprehensive evaluation and multidisciplinary collaboration in unmasking underlying conditions.

Conclusion

The case of Mr. XX underscores the intricate interplay between respiratory symptoms and systemic illness, emphasising the necessity of a broad differential diagnosis. Through meticulous investigation and interdisciplinary management, clinicians successfully unravelled the underlying HIV infection contributing to his uncontrolled asthma. This case serves as a poignant reminder of the importance of thorough evaluation in complex clinical presentations, ultimately leading to timely diagnosis and intervention.

Treatment

Following the diagnosis of HIV and Pneumocystis pneumonia (PCP), Mr. XX received a comprehensive treatment regimen. This included initiation of antiretroviral therapy (ART) to suppress HIV replication and restore immune function. Additionally, he was administered antibiotics for the treatment of PCP, likely trimethoprim-sulfamethoxazole (TMP-SMX), along with adjunctive corticosteroid therapy to reduce inflammation associated with PCP.

Outcome and follow up

With the initiation of ART and appropriate antimicrobial therapy, Mr XX experienced significant improvement in his symptoms and overall health. His asthma symptoms, which were previously refractory to treatment, began to stabilise, and the frequency of exacerbations decreased. Additionally, the resolution of PCP contributed to respiratory function improvement. Regular follow-up appointments were scheduled to monitor his response to treatment, manage potential side effects of ART, and address any ongoing health concerns.

Long-term management included adherence to ART to maintain viral suppression and prevent disease progression. Close monitoring for opportunistic infections and other HIV-related complications was essential. Additionally, Mr. XX received ongoing support from a multidisciplinary team, including infectious disease specialists, respiratory physicians, and HIV/AIDS specialists, to optimise his health outcomes and quality of life.

Overall, the timely diagnosis and initiation of appropriate treatment resulted in a favourable outcome for Mr XX, highlighting the importance of early detection and comprehensive management in patients with complex medical conditions.

Background

This intriguing case underscores the complexity of medical presentations and the importance of thorough investigation in uncovering underlying conditions. Initially presenting with uncontrolled asthma, Mr. XX's journey towards diagnosis revealed significant comorbidities, including undiagnosed HIV infection and Pneumocystis pneumonia (PCP).

Concerns arose regarding the potential masking of Addison's disease by corticosteroid use in the management of asthma. The cessation of steroids and inhalers precipitated an Addisonian crisis, highlighting the need for vigilance in monitoring patients on long-term corticosteroid therapy.

The discovery of oesophageal candidiasis further complicated the clinical picture, prompting a deeper investigation into immune function and potential underlying causes.

The relevance of sexual history in the context of asthma exacerbations was initially unclear. However, Mr XX's disclosure of his sexual orientation and subsequent HIV diagnosis underscored the importance of considering social and behavioural factors in comprehensive patient care.

Patient Perspective

"Before my health journey began, I thought asthma was just something I had to manage with inhalers and occasional trips to the doctor. But as my symptoms worsened over time, I realised there was something more going on beneath the surface.

Each visit to the doctor left me feeling frustrated and confused as my asthma remained uncontrolled despite trying various medications. It wasn't until I started experiencing weight loss and recurrent chest infections that I began to realise there might be something else going on.

When the doctors found the mass in my chest, I was scared and overwhelmed. The diagnosis of thymoma was daunting, but it was just the beginning of uncovering the layers of my health issues.

Learning about my HIV diagnosis was a shock. I never imagined that a chronic condition like HIV could be silently affecting my health for so long without my knowledge. It made me question everything and reevaluate my approach to my health.

The journey to managing my HIV and its associated complications, like Pneumocystis pneumonia and Addison's disease, has been challenging. But with the support of my healthcare team and loved ones, I've learned to navigate this new reality.
Looking back, I realise how important it is to advocate for yourself and to be proactive about your health. My journey has taught me the value of seeking comprehensive care and not settling for surface-level explanations. It's a reminder that our health is complex and interconnected, and sometimes the answers we seek are hidden beneath the surface."

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