Case Series of the Effects of COVID - 19 on Oaktrees Eating Disorder Ward – Lessons Learnt

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Background

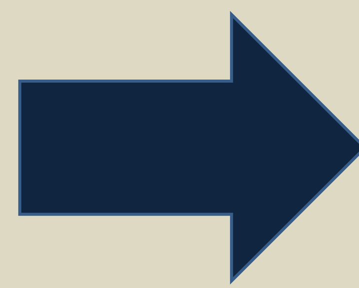
Early in the COVID-19 pandemic, every patient on Oaktrees Eating Disorder Unit became infected at the same time with Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2). At the time, this presented staff with new clinical challenges and it was incredibly difficult and stressful to manage. Following the incident, it provided a unique opportunity to examine any patterns in the presentation of COVID-19 in patients with anorexia nervosa. Recognising patterns will hopefully allow for early diagnosis in the future, and prevent significant spread of disease on the ward again.

Method

Clinical care records (both online and paper) were reviewed for each patient who contracted COVID-19. General patient demographics were recorded including age, sex, ethnicity, past medical history and BMI at the time of infection. Symptoms and signs were categorised. Blood tests were reviewed. Change in BMI during the time of infection was used as an objective indication of psychological well being as well as a marker of how COVID–19 affected their eating disorder.

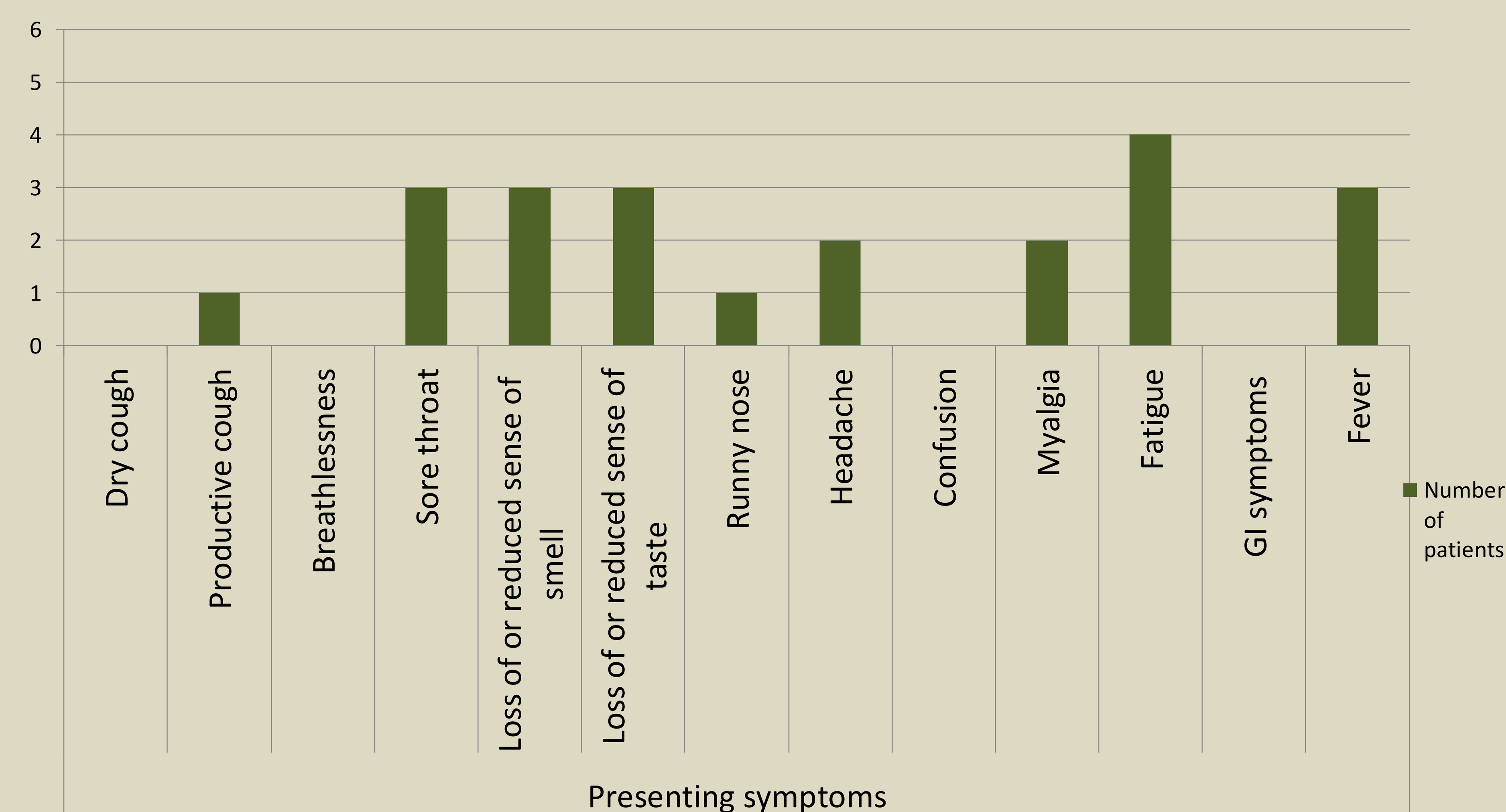
Results

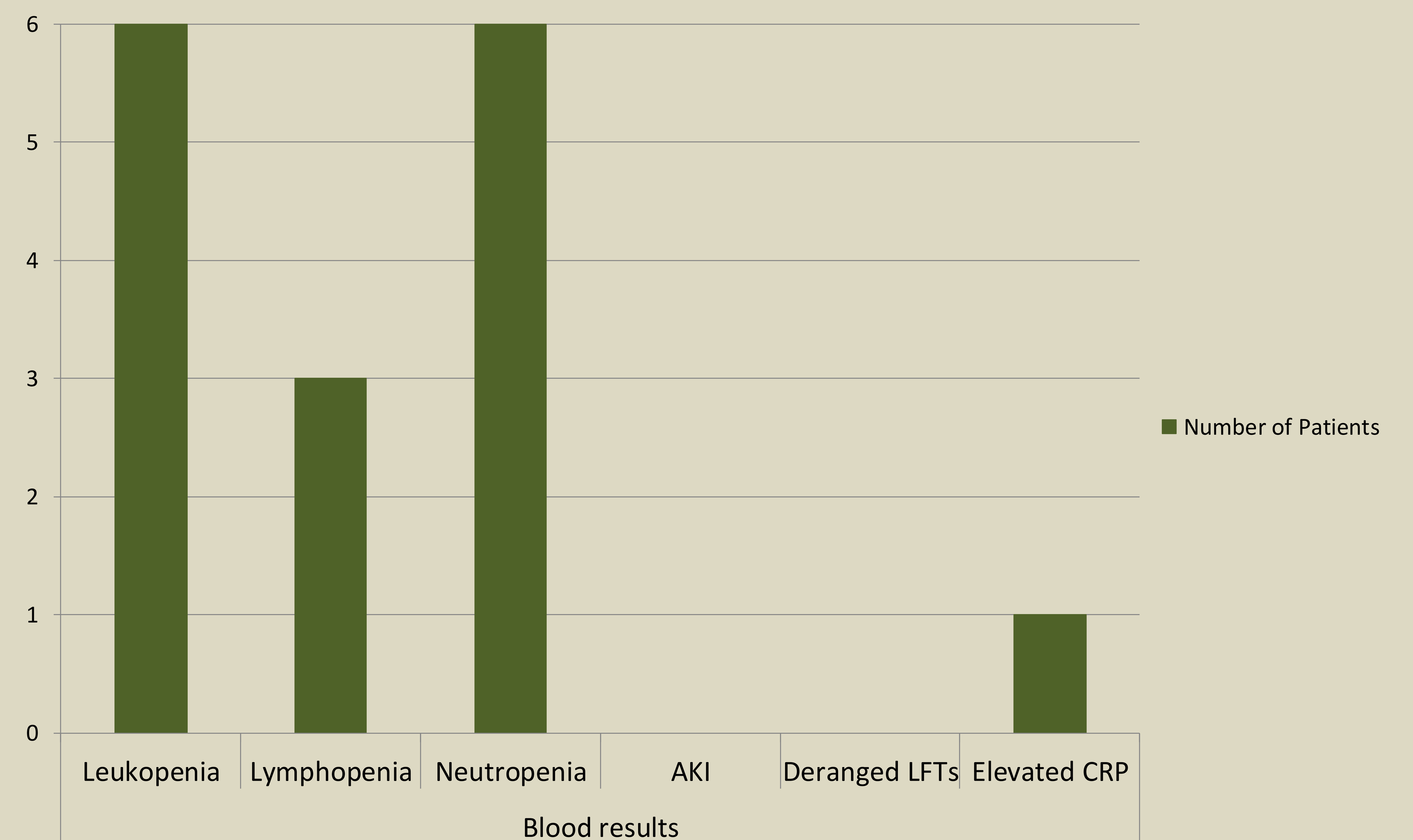
6 patients were infected with SARS-CoV-2 on Oaktrees ward between 17/04/2020 to 12/05/2020. Overall clinical presentations were mild. The median period of isolation was 14 days. 4 out of the 6 patients continued to restore their weight despite being in isolation. 2 patients were treated with antibiotics for suspected pneumonia and 1 patient required transfer to an acute medical ward, where she was also treated in intensive care. She was transferred after presenting with acute confusion and poorly controlled epilepsy. She was treated in hospital for possible COVID-19 encephalitis, pneumonia and her epilepsy medication was reviewed.



Patient demographics

- Age ranged from 20 to 45 years.
- 5 out of the 6 patients were female
- BMIs of the patients ranged from 12.7Kg/m2 to 15.1Kg/m2.
- 6 out of 6 patients were White British.
- 3 out of the 6 patients had significant past medical history. 1 patient had asthma, 1 patient had a history of previous stroke and epilepsy, 1 patient had a history of idiopathic thrombocytopenia.
- 1 out of 6 patients was an ex-smoker and was on Nicotine Replacement Therapy.





Conclusion

- Examining this time period in more detail has allowed us to identify patterns of COVID-19 within our population of patients. There was an expectation that the patients would not do well. However, overall the patient cohort experienced a relatively mild illness
- Presenting symptoms were often non specific and therefore a low threshold for testing seems appropriate
- Lymphopenia was present in 50% of our population and when present, appeared to be an early sign
- Reassuringly, the majority of patients continued to restore weight whilst in isolation
- The ward responded and adapted quickly to create a bespoke policy for patients with anorexia nervosa who presented with symptoms of COVID-19 (See Oaktrees Ward Pathway COVID-19)
- This data has also been included in a central study, in order to increase knowledge of anorexia nervosa and COVID-19 on a national scale

Oaktrees Ward Pathway COVID-19

Apply clinical judgement; don't forget non-COVID causes of illness

Symptoms COVID-19: Fever > 37.8ºC +/- new continuous cough, SOB (3-64%), myalgia (11-15%), nasal symptoms (4-24%), sore throat (14%), headache (6-34%), anosmia (1-66%)

Assessment:

1. Respiratory Questions:
   - **How is your breathing today?**
   - **Is it better, worse or no change from yesterday? Are you breathing harder or faster than usual when doing nothing at all?**
   - **What could you do yesterday that you can't do today? What makes you breathless now that didn't make you breathless yesterday?**
   - **Ask about cough and sputum**
   - **Then ask: Are there any other symptoms causing concern?**
2. Signs of non-respiratory illness: Think about non-covid cause of acute illness.
3. Examination: Oxygen saturations and respiratory rate are the most important part of the examination. Chest auscultation tends to be unremarkable in COVID-19. Avoid examination of throat.

Mild Symptoms
Not SOB
Able to do ADLs
Completing full sentences
RR 14 – 20
Oxygen Sats > 96%*

*Oxygen Sats could be less than 94% at rest at baseline in patients with underlying respiratory / cardiac illness

Moderate Symptoms
Some (new) SOB +/- SOBOE
Mild chest tightness
Able to do ADLs but lethargic
Breathing worse than yesterday
Purulent sputum
Completing full sentences
Adult RR 21 – 24
Adult Oxygen Sats ≥ 94%*

Severe Symptoms
Worsening SOB
Chest pain
Unable to get out of bed
Not completing full sentences
New confusion
RR > 25
Oxygen Sats < 94%*
Reduced UO; cold extremities; mottled skin

Stay On Ward:

Advice:

Inform Eating Disorder Consultant

Request swab from IPC

Paracetamol, fluids, self-isolating as per guidance

Safety-net advice:

If deteriorates contact ward doctor or on-call doctor (**Note:** patients can become unwell on day 6-8 and rapidly deteriorate)

Stay on Ward With Close Observations

Advice as per Mild AND :

Consider treatment of community acquired pneumonia: CRB-65 score ≥ 1 and/or signs bacterial pneumonia present and/or risk factors present

1st Line: Doxycycline PO 200mg on day 1, then 100mg once a day to complete 5/7 course **OR** Clarithromycin 500mg bd for 5 days

Pregnancy: consider Clarithromycin PO 500mg bd 5 days (use when benefits considered to outweigh risk)

If asthma / COPD: Continue usual inhaled therapy. Short course of prednisolone IF clinically indicated (symptoms and signs of bronchospasm/wheeze)

Assess RR and Oxygen sats QDS

Use clinical judgement; consider discussion with medical team if considering hospital admission

For hospital admission:

If:

Sats – Less than 93%
Severe breathlessness
Signs of Sepsis
Other emergency signs

Refer via Arrowepark Covid pathway.

If not for admission:

Consider antibiotics as previous box
Start end of life care
Consider refer to Chester COVID Ward for palliative care (TBC)

If unable to isolate patient due to mental state, transfer to Chester COVID ward