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An Audit of Vaccination Recommendation in Newly Diagnosed Chronic lymphocytic Leukaemia

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Background:

Chronic Lymphocytic Leukaemia (CLL)

CLL is a Chronic lymphoproliferative disorder characterised by a progressive accumulation of functionally incompetent lymphocytes of monoclonal origin. It is the most commonly occurring leukaemia in adults with a median onset of 65 years of age. After initial diagnosis there is a low risk of progression over the next 5 years and treatment often involves a 'watch & wait' approach.

Indicators of progression include:

- Increasing lymphocytosis
- Cytopenias indicating BM failure
- Lymphadenopathy, Hepatomegaly and Splenomegaly

Complications of CLL include:

- Increased susceptibility to infection
- autoimmune haemolytic anaemia
- immune thrombocytopenia
- transformation to high grade disease

CLL & Infection

Studies have indicated a high incidence of infection in CLL patients even in the early stages of disease eg Hamblin & Hamblin, 2008

- 55% CLL patients 1 or more documented infection
- 27% had at least 1 infection related hospital admission

Increased risk of infection in CLL due to:

1. Suboptimal antibody response & normal IgG concentration
2. Hypogammaglobulinaemia

BHS guideline Recommends:

1. **All patients with CLL should be offered seasonal influenza vaccination**
2. **All patients with CLL should be offered pneumococcal vaccination (Prenvar 13-conjugate vaccine and then Pneumovax 23-polysaccharide vaccine)**
3. **All Live vaccinations should be avoided**

Aims:

- To Identify if newly diagnosed CLL patients are advised to get vaccinations against influenza and Pneumococcus at 1st Haematology Clinic

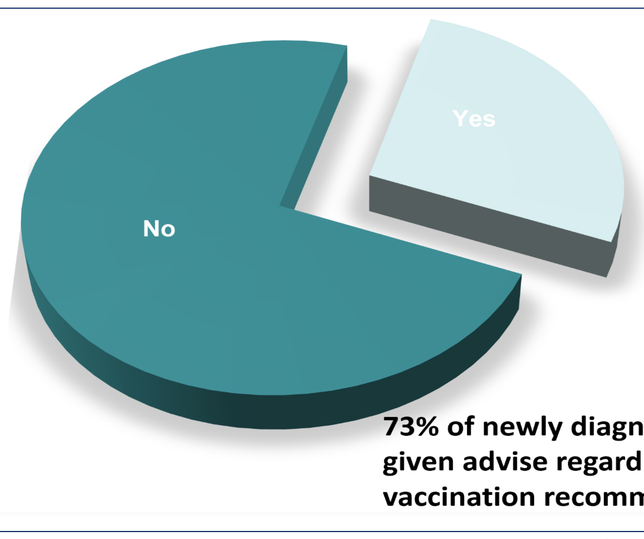
Method:

- All patients with phenotyping report containing the term 'CLL' between the 1st April 2017 and the 30th September 2019
- First Haematology Clinic Attendance identified
- Information on vaccination obtained from electronic clinic records on Trakcare

Patient Cohort:

- 140 patients identified, of these:
  - ✓12 had not been seen at clinic
  - ✓6 were diagnosed before April 2017
  - ✓5 were not CLL
  - ✓2 no information available on Trakcare
- **Final Cohort: 115**

Result:



73% of newly diagnosed CLL patients were not given advise regarding vaccination nor was vaccination recommended to their GPs

Figure 1. Pie chart representing 115 patients; 31 patients received advise regarding vaccinations, 84 patients did not

Conclusion:

- Newly diagnosed CLL patients and GPs are not routinely being advised regarding Influenza and Pneumococcus Vaccination
- This may impact the number of CLL patients being vaccinated increasing the risk of infection in this population
- This in turn may lead to:
  - ✓Increased infection related hospital admissions,
  - ✓Increased morbidity & mortality

Recommendations:

- **Poster & presentation of results to Haematology Department to raise awareness regarding the importance of vaccination in this patient group**
- **Proforma for clinic letters/checklist for newly diagnosed CLL patients to ensure including at first clinic appointment**
- **Re-audit once awareness raised and changed implemented**

References

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