http://dx.doi.org/10.51521/WJCRCI.2023.220124

## ISSN: 2835-1568 CODEN: USA DOI: 10.51521



# WORLD JOURNAL OF CASE REPORTS & CLINICAL IMAGES

Advancing Cases



Aaron Niblock, et al., 2023

# World Journal of Case Reports and Clinical Images

http://dx.doi.org/10.51521/WJCRCI.2023.220124



## **CLINICAL IMAGE**

# Follicular Lymphoma Mimicking 'Adenocarcinoma with Clear Cells and Signet Ring Morphology'

### Aaron Niblock<sup>1</sup>,<sup>2</sup>, S Rajendran<sup>3</sup>

<sup>1</sup>Haematology department, Antrim Area Hospital, Northern Ireland <sup>2</sup>School of Medicine, Ulster University, Northern Ireland <sup>3</sup>Pathology Department, Antrim Area Hospital, Northern Ireland

#### **Corresponding Author:**

Aaron Niblock, Haematology Department, Antrim Area Hospital, Northern Ireland; School of Medicine, Ulster University, Northern Ireland

#### **Citation:**

Aaron Niblock, S Rajendran (2023). Follicular Lymphoma Mimicking 'Adenocarcinoma with Clear Cells and Signet Ring Morphology'. 2023 October-November; 2(2)1-4.

#### Copyrights

© 2023, Aaron Niblock, et al. This article is licensed under the Creative Commons Attribution-Non-Commercial-4.0-International-License-(CCBY-NC) (https://worldjournalofcasereports.org/blogpage/copyright-policy). Usage and distribution for commercial purposes require written permission.

Received Date: 31-10-2023 Revised Date: 05-11-2023 Accepted Date: 07-11-2023 Published Date: 14-11-2023

### Introduction

#### **Case Presentation**

91-year-old female who presented with epigastric pain. CT showed a 13 cm mass in the right lower quadrant encasing the right colon and enlarged lymph nodes. Histology of the CT guided biopsy of the mass showed malignant tumour which was composed mainly of cells with clear, vacuolated cytoplasm and eccentric nuclei (signet-ring like). The cells were surrounded by sclerotic stroma and arranged in a nested configuration (Image 1). Morphological features of carcinoma including keratinisation and glandular differentiation were not evident. Melanin pigment in indicate melanoma was not seen. On immunohistochemistry broad spectrum cytokeratin (AE1/3 and CAM5.2) and SOX10 were negative which would exclude carcinoma and melanoma respectively. The tumour was diffusely positive with CD45 and CD20 confirming B-cell lineage (Image 2). There was positivity with BCL2 and germinal centre makers BCL6 and CD10. Staining with antibodies to CD21 and CD23 confirms the presence of at least partial follicular architecture.

Kappa and lambda shows lambda light chain restriction (Image3). EBER was negative. The final diagnosis was non-Hodgkin B-cell lymphoma, most likely a follicular lymphoma with signet-ring like morphology which is difficult to grade due to the unusual morphology. FISH showed BCL2 rearrangement confirming diagnosis of follicular lymphoma.

This case was challenging due to the extra nodal location and unusually morphology which resembled a signet ring cell carcinoma. Within follicular architecture highlighted by CD21 and CD23 there were some centrocyte and centroblast like cells however no conventional areas of follicular lymphoma were seen. Grading is difficult due to the non-standard morphology and extra nodal location. Very few cases of follicular lymphoma with signet ring morphology has been previously described. The vacuoles are believed to be composed of intracytoplasmic immunoglobulin deposits. The lambda restriction would support this theory.

## World Journal of Case Reports and Clinical Images

http://dx.doi.org/10.51521/WJCRCI.2023.220124



Image A: H & E with clear cells and signet shaped morphology highly suggestive of adenocarcinoma



Image B: Demonstrating diffuse cd20 positivity confirming B Lymphocytic origin.

## World Journal of Case Reports and Clinical Images

http://dx.doi.org/10.51521/WJCRCI.2023.220124



Image C: Lambda restriction demonstrating clonality

Conflicts of interest: None

Ethical Consideration: None

Acknowledgements: None

http://dx.doi.org/10.51521/WJCRCI.2023.220124

Submit your manuscript to the World Journal of Case Reports and Clinical Images and benefit from:

- Convenient online submission
- Rigorous peer review
- Immediate publication on acceptance
- Open access: articles freely available online
- High visibility within the field
- Retaining the copyright to your article

Submit your manuscript at https://worldjournalofcasereports.org/

&

wjcasereports@gmail.com; submission@worldjournalofcasereports.org

