



SENTARA

Laboratory Services

Patient Name: Harbuck, Michael SN21-12029
 Medical Record: 74237395 Date of Birth: 4/27/1972
 HAR: Age: 49 yrs
 Sex: male

Requisition #: GRN04488117 Chart ID#: Race: WHITE

Submitter

Miscellaneous - SHRH 2204 Wilborn Ave, South Boston Virginia 24592

Surgical Pathology Report (Final result) SN21-12029

Authorizing Provider:	Souza, Pablo C, MD	Ordering Provider:	Souza, Pablo C, MD
Ordering Location:	Sentara Norfolk General Hospital	Collected:	08/05/2021
	Laboratory		
Pathologist:	Fisher, Stephen I, MD	Received:	08/05/2021 0810

Specimens

A Other, Slides received from Sentara Halifax labeled HS21-02105 (2 slides, 1 block) and HC21-0075 (3 slides, 1 block)

Diagnosis

OUTSIDE CASE 1) SNGH HEMATOPATHOLOGIC EVALUATION [SHRH; HS21-02105; COL 08/02/21]:
 LYMPH NODE, GROIN, NEEDLE CORE BIOPSY:
 - FOLLICULAR LYMPHOMA, GRADE 1-2 OF 3, FOLLICULAR [WHO 2016].

COMMENT: Findings support a diagnosis of follicular lymphoma, grade 1-2 of 3, follicular pattern [WHO 2016]. No large cell lymphoma component is observed.

Of note, the KI67 proliferative rate is elevated in some follicles predicting more aggressive/progressive behavior. Correlate clinically.

REFERENCES:

- 1) Swerdlow SH, Campo E, Harris NL, Jaffe ES, et al(Eds): WHO Classification of Tumours of Haematopoietic and Lymphoid Tissues (4th edition). IARC: Lyon 2017, pp. 266-268.
- 2) Wang SA1, Wang L, Hochberg EP, Muzikansky A, Harris NL, Hasserjian RP. Low histologic grade follicular lymphoma with high proliferation index: morphologic and clinical features. Am J Surg Pathol. 2005 Nov;29(11):1490-6.

Reviewed by Dr. Smith who concurs.
This confirms Dr. Fisher's telephonic conversation with Dr. Souza on 08/13/21.

Electronic signature: Stephen I. Fisher, M.D. 757-388-2435
 Hematopathology Division, Sentara Norfolk General [SNGH], Flow Cytometry Lab
 CPT: 88305x1, 88342x1, 88341x15, 88365x1, 88364x2

OUTSIDE CASE 2) ABDOMINAL FLUID, CYTOSPIN SMEARS AND CELL BLOCK [SHRH; HC21-00075; COL 08/02/21]:
 - SMALL T CELLS, FEW SMALL B CELLS, AND REACTIVE MESOTHELIAL CELLS.

COMMENT: Findings support a reactive pleocytosis. No suspicious B cell population is identified. Consider flow

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cytometric studies on abdominal fluid if indicated clinically.

Electronic signature: Stephen I. Fisher, M.D. 757-388-2435
Hematopathology Division, Sentara Norfolk General [SNGH], Flow Cytometry Lab
CPT: 88305x1, 88108x1, 88342x1, 88341x16, 88365x1, 88364x2

Electronically signed by Fisher, Stephen I, MD on 8/13/2021 at 0956

Microscopic

OUTSIDE CASE 1)

H&E sections show cores of lymphoid tissue with neoplastic follicle centers containing centrocytes and few centroblasts [<5 /HPF]. No diffuse component is present.

IMMUNOSTAIN INTERPRETATION [16 IHC; 3 IHS]:

A2: BCL1, MUM1, BCL2, CD3, CD5, PAX5, BCL6, CD10, CD20, CD21, CD23, CD30, P53, KI67, CD138, CMYC; ISH KAPPA, LAMBDA, EBER

IMMUNOSTAIN INTERPRETATION:

A2: BCL1 is negative. MUM1 stains few plasma cells. BCL2 stains follicles. CD3 and CD5 stain T cells. B cells are CD5 negative. PAX5, BCL6, CD10, and CD20 stain B cells. CD21 and CD23 stain follicular meshworks. CD30 stains few activated lymphoid cells in follicles. P53 is negative. KI67 is variably increased [10-60%], CD138 stains 1% plasma cells. CMYC is negative. ISH KAPPA is restricted in follicles. ISH LAMBDA is negative. EBER is negative. Positive and negative controls stain appropriately.

FLOW [ID21-02318]:

80% clonal B cells expressing CD10[partial], CD19, CD20, CD45 BCL2 and FMC7; Negative for CD5, CD23, and CD30.

OUTSIDE CASE 2)

Cytospin smears and H&E section show proteinaceous fluid with many small, irregular lymphoid cells and activated mesothelial cells.

IMMUNOSTAINS OBTAINED [17 IHC; 3 ISH]:

A1: BCL1, MUM1, BCL2, CD3, CD5, PAX5, BCL6, CD10, CD20, CD21, CD23, CD30, P53, KI67, CD138, CMYC, CKC; ISH KAPPA, LAMBDA, EBER

IMMUNOSTAIN INTERPRETATION:

A1: BCL1 is negative. MUM1 is negative. BCL2, CD3, and CD5 stain many small T cells. BCL6 and CD10 are negative. PAX5 and CD20 stain few small B cells. CD21, CD23, CD30, and P53 are negative. KI67 is low [1%]. CD138 is negative for plasma cells. CMYC is negative. CKC stains reactive mesothelial cells. ISH KAPPA and LAMBDA are negative. EBER is negative. Positive and negative controls stain appropriately.

NOTE: Immunohistochemical and in-situ hybridization stains were requested after examining the smears and/or the H&E stained cell block/tissue sections. The stains were needed to evaluate for cytomorphologic details [cellular and nuclear size, shape, nucleoli, cytoplasm, vacuolation] and immunoarchitectural details [cell clusters, sheets, follicles, nodules, compartment, etc.] in the cell populations of interest that cannot be identified by other methods, such as flow cytometry.

Kappa/lambda ISH results are scored as positive based on the presence of hybridization signals. These probes are used in tandem with the kappa/lambda ISH to determine a monoclonal or polyclonal pattern of staining for the population of interest. Absence of signals is interpreted as a negative result. FFPE, Ventana Medical Systems, Inc.'s kappa/lambda DNP Probe, ISH iView Blue Plus Detection Kit. This is a laboratory test developed at Sentara Norfolk General Hospital.

EBER ISH results are scored as positive based on the presence of hybridization signals within the population of interest. Absence of signals is interpreted as a negative result. FFPE, Ventana Medical Systems, Inc.'s EBER 1 DNP Probe, ISH

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iView Blue Plus Detection Kit. This is a laboratory test developed at Sentara Norfolk General Hospital.

Clinical Information

Patient is a 49 yo male with left groin enlarged lymph node and generalized adenopathy.

CT imaging studies from 08/01/21 show:

Lymph nodes: Multiple enlarged bilateral iliac, inguinal, and femoral lymph nodes measuring up to 2.8 cm short axis. Innumerable enlarged mesenteric lymph nodes and retroperitoneal lymph nodes.

Lymph nodes: Mild bilateral axillary lymphadenopathy measuring up to 1.5 cm short axis. Partially imaged increased number of posterior triangle lymph nodes. Partially imaged supraclavicular lymphadenopathy. Multiple enlarged mediastinal lymph nodes with conglomerate of lymph nodes measuring approximately 3 cm short axis anterior to the aorta. Cardiophrenic lymphadenopathy measuring up to 2.6 cm short axis. Upper abdominal lymphadenopathy again noted, only partially imaged.

Gross Description

ASR Statement

Immunohistochemical testing, when applicable, has been developed and its performance determined by the Immunohistochemistry Laboratory at Sentara Norfolk General Hospital. It has not been cleared or approved by the U.S. Food and Drug Administration (FDA). The FDA has determined that such clearance or approval is not necessary. These tests should be used as an aid for clinical purposes and integrated with other findings. This laboratory is certified to perform high complexity testing under the Clinical Laboratory Improvement Amendments of 1998.

Unless 'gross-only' is specified, the final diagnosis for each specimen is based on microscopic examination of sections of the tissue.

Resulting Labs

SRL	SENTARA REFERENCE LAB, 600 Gresham Drive, Raleigh Building, 3rd Fl, Norfolk VA 23507 Director: Dennis A. Rowley, M.D., Medical Director	757-388-3621
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