

Curriculum Vitae

Intisar Salim Hasan
(M.B.Ch.B., M.Sc., F.I.B.M.S)
Department of Pathology
(Professor: Histopathologist, Cytologist)
Faculty of Medical Sciences
University of Duhok
Duhok, Iraq
MBCbB, MSc, FIBMS



Mobile: +964 750 4788000, +964 62762 3443
Email: intisarsalimpity@gmail.com

(Histopathologist, Cytopathologist)

PERSONAL DATA

Surname: Pity

Forename: Intisar

Middle names: Salim Hasan

Gender: Female

Marital Status: Married, Two sons and one daughter

Date of Birth: 5th -July-1960

Place of Birth: Iraq

Nationality: Iraqi

Current Residence: Duhok, Iraq.

Academic Status: Professor (MBCbB, MSc, FIBMS)

Languages: Arabic and English (spoken and written).

Address for Correspondence: Department of Pathology, Faculty of Medical Science, School of Medicine, University of Duhok, Duhok, Iraq

CURRENT POSITION

- **Professor** of Histopathology
- **Physician in Charge**, Department of Histopathology, Central Laboratory, Duhok, Iraq.
- **Director, supervisor and trainer** in Iraqi Board for Medical Specialization/Histopathology
- **Director, supervisor and trainer** in Arab Board for Medical Specialization/Histopathology

- **Director, supervisor and trainer** in Kurdistan Board for Medical Specialization/Histopathology

Education and Qualifications

Postgraduation

- A- **2002-2006: (FIBMS) Fellow of Iraqi Board for Medical Specialization** at the Department of Pathology, College of Medicine, University of Baghdad, Baghdad, Iraq (No. 194 at 16th Jan-2006). Awarded the degree of Iraqi Board Pathology/Histopathology, **Grade: Very Good**; Ranked First at University level.

Iraqi board thesis title: Central nervous system tumors, a clinicopathological study.

- B- **Sep. 1987-May 1989: Master of Science at the Department of Pathology**, College of Medicine, University of Mosul, Iraq (No. 3/11/14495 at 9th Nov-1989). **Grade: Very Good**; Ranked First at University level.

MSc thesis title: The role of cytology in the diagnosis of gynecological diseases.

University

Sept 1978 – June 1984: Bachelor of Medicine and Surgery, College of Medicine, University of Mosul, Mosul, Iraq. Awarded an MBChB degree; **Grade: Good**; Ranked 5th at University level amongst 205 graduates (34479 at 31/7/84).

School

1978: Mosul College - Secondary school certificate, **Grade: Excellent**; Ranked First on national level.

1972-1978: Baashika Secondary School, North of Iraq

1966-1972: Bahzani Primary School, Baashika, North of Iraq

Employment

2013- till now: Professor in Faculty of Medical Science, School of Medicine, University of Duhok, Duhok, Iraq (11674 at 31-12-2013).

2009 - till now: Director of the Kurdistan Board, Laboratory Medicine Training centre in Duhok.

2009 - till now: Head of Duhok Laboratory Medicine/Kurdistan Board for Medical Specialization, Erbil, Iraq (since 2009-2013)

2009 - till now: Head of Department of Histopathology, Central laboratory, Directorate of health, Duhok, Iraq (since 2009-2013).

2009 - till now: Director, supervisor and trainer in Iraqi Board for Medical Specialization/Histopathology

2009 - till now: Director, supervisor and trainer in Arab Board for Medical Specialization/Histopathology

2007 - 2013: Assistant Professor in Faculty of Medical Science, School of Medicine, University of Duhok, Duhok, Iraq (77/4897 at 24-9-2007)

2004 - 2007: Lecturer, Department of Pathology, College of Medicine, University of Duhok, Kurdistan Region, Iraq (2/8/3678 at 13-10-2004).

1999- 2004: Lecturer, Department of Pathology, College of Medicine, University of Mosul, Iraq (No. 9/16/9938 at 2-12-1999).

1989-1999: Assistant Lecturer, Department of Pathology, College of Medicine, University of Mosul, and Registrar in Mosul Teaching Hospitals, Iraq (No. 4619 at 12-12-1989).

1987-1989: Graduate MSc student, Department of Pathology, College of Medicine, University of Mosul

1985-1987: Demonstrator, Department of Pathology, College of Medicine, University of Mosul, and Resident in Mosul Teaching Hospitals, Iraq (2870/س at 18-8-1985).

1984-1985: Rotator in Mosul Teaching Hospitals, Directorate of health, Mosul, Iraq (No. 4480 at 5-8-1984).

TEACHING DUTIES

1. Teaching duties of undergraduate and postgraduate medical students of Histopathology and Cytology, Faculty of Medical Science, School of Medicine, School of Dentistry & School of Pharmacy, Duhok, Iraq (since 2004).
2. Consultant histopathologist/Laboratory Medicine, Duhok, Iraq (since 2006)
3. Consultant histopathologist in Azadi Teaching Hospital, Duhok, Iraq (2004-2006)
4. Training and supervision of Iraqi Board candidates in Histopathology (since 2006)
5. Training of Arab Board candidates in histopathology (since 2011)
6. Training of Kurdistan Board candidates in histopathology
7. Training of MSc and Diploma students in histopathology, Faculty of Medical Science and Faculty of Science (since 2006).
8. Examiner for the Kurdistan Board of Pathology, Erbil, Iraq (since 2009)
9. Teaching duties (Histopathology-theory and Practical) to undergraduate and postgraduate Medical students at the College of Medicine, University of Mosul, Mosul, Iraq (1989-2004).

Teaching Hospital Work Experience:

2006-now: Consultant Histopathology and Physician in Charge of the Department of Histopathology, at Central Laboratory (Teaching Histopathology center of the Faculty of Medical Sciences, University of Duhok). NB: Central Laboratory is the only referral Histopathology centre in Duhok province (pop ~ 2 million).

2004-now: Trainer of undergraduate and postgraduate candidates in Duhok.

1989-2004: Specialist Histopathology at the Department of Histopathology, Al-Zahrawi Teaching Hospital, Mosul, Iraq. (Al-Zahrawi is the largest Teaching Hospital in Mosul).

1985-1989: Senior House officer at Al-Zahrawi Teaching Hospital Laboratories of Mosul (Practiced in Histopathology, Microbiology, Biochemistry and Hematology).

1984- 1985: Junior House Officer – rotation included Medicine, General Surgery, Obstetrics and Gynecology, Neurosurgery and Urology at Directorate of Health, Mosul, Iraq.

Membership of Associations/Committees

- Member of Middle East Medical Assembly since (MEMA) 2014.
- Member of Iraqi Medical Association since 1984.
- Member of International Iraqi Medical Association (IIMA) since 2009.
- Member of International Academy of Pathology-Arab Division (IPAD) since 2008.
- Member of Duhok Medical Association since 2006.
- Member of Iraqi Histopathology Association since 2006.
- Member of Kurdistan Pathologists since 2004.
- Member of Academic University Lectures (Mosul) from 1989-2004.

Research and Publications

Title	Publisher and Magazine Name	Year
24. Coexpression of HER2 and p53 in gastric & esophageal adenocarcinoma	DHJ; 2016;Vol. 1 (in process)	2016
23. BRAF ^{V600} Gene Mutation in Thyroid Cancer in Duhok-Iraq	DHJ; 2015;Vol. 1	2015
22. Cutis Verticis Gyrata and Neurofibroma	DHJ; 2014;Vol. 1	2014
21. Pregnant and postpartum	Cancer Research Journal	2013

women with atypical glandular Cells: Follow-up and Evaluation for high-risk HPV	2013; 1(4): 31-36	
20. Angiogenesis, p53, and Bcl ₂ in Colorectal Carcinoma	IJOART. 2013;2(3):1-8	2013
19. Follow up of Atypical Squamous Cell Pap Smears in Iraqi Women	APJCP. 2012; 13:3455-60	2012
18. Characterization of Undifferentiated Malignant Spindle Cell Tumors, a Practical Immunohistochemical Study in Kurdistan Region, Iraq	JABHS 2012; 13(4): 24-33	2012
17. Expression of Ki-67 and p53 in Oral Squamous Epithelial Abnormalities	Medical Journal of Babylon 2013;10(1):85-99	2013
16. Cellular Proliferation in Oral Mucosal Atypia	IJSER. 2013;4(2): 1-4	2013
15. Identification of helicobacter pylori in gastric biopsies of patients with chronic gastritis, histopathological, immunohistochemical study	DMJ 2011;5(1):69-77	2011
14. Histopathological and immunohistochemical approach for characterization of undifferentiated malignant Tumors	JABHS 2011;12(2):49-57	2011
13. Hysterectomy. A clinicopathologic study	Tikrit Medical Journal 2011; 17(2): 7-16	2011
12. Soft tissue tumors- Histopathological study of 93 cases	Ann. Coll. Med. Mosul. 2010;36(1&2):92-98.	2010
11. Pleural liposarcoma	DMJ 2010;4(1):74-80	2010
10. Immunohistochemical approach to the diagnosis of malignant round cell tumor	Zanco J. Med. Sci. 2010; 14(1):144-50	2010
9. Diagnostic yield of TURP and	Tikrit Journal of	2010

TURB in Mosul in 2 year study	pharmaceutical science. 2010;6(2):138-46	
8. Central nervous system tumor. A clinicopathological study	J. Dohuk Univ. 2008;2(1):173-80	2008
7. Synovial sarcoma of the foot	DMJ. 2008; 2: 141-145	2008
6. Laryngeal tumors in Ninevah province. Analysis of 829 biopsies.	Ann. Coll. Med. Mosul. 2002; 28 (2): 136-139	2002
5. Yield of jejunal biopsy in malabsorption syndrome.	JIMA. 2000;32:137-138.	2000
4. Cervical and vaginal cytological findings in women using IUCD in Mosul.	Ann. Coll. Med. Mosul. 1999;96:278.	1999
3. Pattern of cervicovaginal infections in Mosul city. Detection by using some diagnostic methods.	Iraqi Medical Journal. 1997;236:17-19	1997
2. Pathological aspects of fibrocystic disease of the breast in Mosul. Analysis of 75 cases.	Iraqi Medical Journal. 1994,1995,1996;43,44,45:67-71.	1994- 1996
1. The role of cytology in the diagnosis of gynecological disease.	Ann. Coll. Med. Mosul. 1995;21:25-29.	1995

Supervision of Theses

Completed Theses

Student Name	Type of Thesis	Title of Thesis	Academic Year
Azad Mustafa Ahmed	Board thesis	Histopathological evaluation of chronic gastritis in Duhok region according to the updated Sydney system	2010-2011

Djwar Ali Hadji	Doblin thesis	Expression of p53 and Bcl-2 in colon carcinoma. Correlation with angiogenesis, grading and staging	2011-2012
Narmeen Hassan	MSc thesis	Detection of BRAF gene mutation in thyroid cancer using PCR	2012-2013
Farashin Rashid Muhammad	Board thesis	Application of immunohistochemical markers using (CK5/6, and TTF1) to categorize lung tumors on Tru-cut biopsy.	2013-2014
Gina James Georges	Board thesis	Her ₂ /neu Expression in Gastric and Esophageal Adenocarcinoma	2012-2014

Theses in Process

Student Name	Type of Thesis	Title of Thesis	Academic Year	University/Institute
Djwar Ali	Board thesis	Application of CD56 for diagnosis of papillary thyroid carcinoma.	2014-2016	Iraqi Board
Chinar	PhD	Histopathologic and Molecular Alterations in Oral Epithelium among Habitual Smokers of Tobacco.	2015-2018	University of Duhok
Hivi	PhD	Cadmium status in patients with breast cancer.	2015-2018	University of Duhok

Attended Conferences & workshops

Date	Nature of participation	Country/Location	Name	
<u>21st July/2014 - 1st August/2014</u>	Clinical Observer Visit	Department of Histopathology St James's University Hospital, Leeds, LS9	Neuropathological approach to muscle & nerve biopsy/brain & spinal cord tumors/& whole brain examination.	24

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11-12 May/2015	Visitor	American university of Beirut/Lebanon	MEMA: Neuropathology workshop	23
11/12/2014	Visitor	Directorate of Health - Duhok	Role of Dentists in Predictability of Orol Cancer	22
7-8 Jun./2014	Visitor	Istanbul/Turkey	Current issues in diagnostic pathology 1 st Meeting of the Turkish division of IAP	21
26-27/Oct./2013	Visitor	Iraq/Erbil- Royal College	Workshop- Train the Trainers	20
28/Nov/2013	Visitor	Iraq/Erbil- orbitaxis	Workshop -E-Learning technologies and audio visual solutions	19
1-5/Dec/2013	Visitor	Iraq/Erbil	Workshop-Skin and soft tissue tumors pathology	18
22-23/Apr/2013	Provider	Iraq /Duhok	Dermatopathology symposium	17
28-31/Mar/2013	Visitor	Sharja/UAE	9 th IIMA conference (Sharja/UAE)	16
19-20/Sept/2012	Provider	Iraq /Duhok	The 2 nd scientific conference of faculty of Medical sciences	15
12-14/May/2011	Provider	Iran/Tabriz	14th Tabriz International Medical Sciences Congress (TIMSC), Tabriz/ Iran	14
27/Apr/ 2011	Provider	Iraq /Duhok	Pathology workshop	13
30/Nov.- 3/Dec/2011	Visitor	Beirut/Lebanon	23 rd Congress of Arab Division International Academy of Pathology	12
24-25/Oct/2011	Visitor	Iraq/Erbil	Intertcollegiate Iraq Liaison Group (ICILG)	11
29-30/Nov/2011	Visitor	Beirut/Lebanon	Molecular Pathology workshop International Academy of Pathology- Arab Division	10
28-30/Mar/2010	Visitor	Iraq/Erbil	2 nd International Conference of Medical Sciences, Hawler university	9
2-4/ May/2010	Visitor	Iraq/Duhok	Kurdistan 2 nd conference of biological sciences, Duhok university	8
27/Apr/2010	Provider	Iraq/Erbil	Pathology workshop	7
4-5/Dec/2009	Visitor	Pathology of lymphoma workshop	Pathology of lymphoma workshop International Academy of Pathology- Arab Division	6
6-8/ Dec /2009	Visitor	Bahrain	21 st Congress of Arab Division International Academy of Pathology	5
9/Aug/2006	Provider	Iraq /Duhok	Genetic symposium	4

24/Mar/2005	Provider	Iraq /Duhok	The 1 st international symposium on breast cancer pathology update	3
2-4/May/2006	Provider	Iraq /Duhok	Kurdistan 1 st conference of biological sciences, Duhok university	2
5/Apr/2006	Provider	Iraq /Duhok	Cervical cancer workshop	1

Abstracts of some researches

Coexpression of HER2 and p53 in Gastric and Esophageal Adenocarcinoma

Gina Games George¹, Hayder Husain Ibrahim², Sardar Hassan Arif², Intisar Salim Pity¹

Abstract

Background and objective

Gastroesophageal adenocarcinoma remains deadly diseases with an on rise incidence. The recently discovered cancer-related molecular markers, such as HER2 and p53, help facilitate response to preoperative therapy and improve overall survival. This study was aimed to detect the immunoexpression of HER2 and p53 in gastric and esophageal adenocarcinoma and to determine the association of these two markers with clinicopathological parameters.

Method

The study was conducted in the Central Laboratory and Directorate of Health, Duhok-Iraq during a period from May 2009 to September 2014 on 101 gastric and esophageal adenocarcinoma cases. Using monoclonal antibodies against HER2 receptors and p53 nuclear protein, slides were stained with the fully automated immunostaining instrument, Ventana Benchmark.

Results

Total positive HER2 immunoexpression (scores +2/+3) was demonstrated in 33.7% of cases with a significantly higher dense HER2 (3+) expression in esophageal adenocarcinoma compared with its gastric counterpart while lesser dense HER2 (2+) was completely absent in esophageal cancer. p53 nuclear staining was observed in 62.4% of cases; it was significantly higher in gastric cancer than esophageal adenocarcinoma. HER2 was limited to the intestinal type whereas p53 was found to be expressed in both

intestinal and diffuse types. No significant coexpression was demonstrated between HER2 and p53 in any of gastric or esophageal adenocarcinoma.

Conclusions

HER2 expression was limited to the intestinal type gastric adenocarcinoma. No significant coexpression of HER2 and p53 was demonstrated in any of gastric and esophageal adenocarcinoma.

BRAF^{V600} Gene Mutation in Thyroid Cancer in Duhok-Iraq

Intisar Salim Pity¹, Ahmad Muhammad Salih², Narmeen Hassan³

ABSTRACT

Background and objectives: This study was done to detect the frequency of BRAF^{V600} mutation in thyroid cancer in Duhok-Iraq, using real time PCR.

Methods: DNA was extracted from formalin fixed, paraffin embedded tissue sections taken from 54 surgically resected primary thyroid cancers. Using Real-Time PCR, the target (BRAF^{V600}) DNA was amplified with the mutation-specific primers.

Results: BRAF^{V600} gene mutation was detected in 27.8% of cases. It was significantly high in conventional papillary carcinoma (26.7%) compared with other papillary variants (p= 0.048), and significantly high among cases with extrathyroid extension. Both medullary and one anaplastic carcinomas were BRAF^{V600} positive. In contrast, all follicular carcinomas and the follicular variant papillary carcinoma were negative for this gene mutation. No association was found between this mutation and any of nodal involvement, gender and age. **Conclusions:** Identification of BRAF^{V600} gene mutation in medullary carcinoma opposes the previous concept that this gene alteration is restricted to papillary carcinoma. Lack of BRAF^{V600} gene mutation among all follicular variant PTC and follicular cancers including the Hurthel cell tumor, extended the argument that these tumors are closely related. Because this mutation was detected in clinically aggressive cancers like MTC, columnar variant PTC and ATC and was restricted to microcarcinoma with nodal metastasis in addition to its significant association with extrathyroid extension (T4), BRAF^{V600} molecular testing might emerge as a clinically useful supplement for the histologic assessment as an important predictor of aggressive clinical course.

- **Pregnant and postpartum women with atypical glandular Cells: Follow-up and Evaluation for high-risk HPV**

Intisar Salim Pity

Cancer Research Journal, 2013; 1(4): 31-36

Abstract: Objectives: The study was an attempt: to find out the prevalence of atypical glandular cells of undetermined significance (AGC) in cervicovaginal smears of pregnant and postpartum women in Duhok-Iraq; follow up these women to investigate the underlying pathology and to test for high-risk HPV (HR-HPV). Methods: From May 2005 to June 2013, all Pap smears of pregnant and postpartum women were analyzed and women with AGC cytology were enrolled in the study. One hundred and fifty two women, for whom follow up was possible, were subjected to colposcopic directed cytology and/or histology for at least 48 months from the initial reading. Their results were comprehensively evaluated, and HR-HPV DNA testing was performed by conventional PCR in 56 cases. Results: Overall, AGC cytology formed 6.7% of all pregnant and postpartum women's Pap smears and 29.6% were at risk for neoplastic epithelial lesions (AGC and premalignant lesions). The diagnosis of \geq low squamous intraepithelial lesion (LSIL) was observed in 14.5% of cases among whom significantly high frequency of HR-HPV DNA was noted compared with those having persistent AGC or negative atypia (NILM). Conclusions: Identical to non-pregnant women, pregnant and postpartum women with AGC cytology are at risk of harboring premalignant and malignant (squamous or glandular) lesions, and testing of AGC cytologic specimens for HR-HPV might help predict neoplastic cases but not to distinguish malignant from premalignant lesions.

Keywords: Pap smear, AGC, Follow Up, High-risk HPV-DNA

- **Follow up of Atypical Squamous Cell Pap Smears in Iraqi Women
APJCP, 2012**

Intisar S. Pity, Maida Y. Shamdeen, Shawnim A. Wais

Abstract

Objectives: To report the prevalence of atypical squamous cells of undetermined significance and atypical squamous cells-cannot exclude high squamous intraepithelial lesion and to determine the possible association of these Pap tests with high-risk human papillomavirus and high squamous intraepithelial lesion in women from Duhok, Iraq.

Design: A prospective, observational study was conducted between January 2005 and December 2011. Overall, 596 women with a cervicovaginal Pap test showing atypical squamous cells of undetermined significance and 93 atypical squamous cells-cannot exclude high squamous intraepithelial lesion for whom pathologic follow-up was available were studied. Follow-up consisted of repeat cytology, colposcopy and histology. High risk human papillomavirus DNA was performed on exfoliated cervical cells from 106 women, using conventional PCR after at least 36 months from the initial Pap smear.

Results: Significantly high proportions of both atypical squamous cells of undetermined significance (87.9%) and atypical squamous cells-cannot exclude high squamous intraepithelial lesion (62.4%) revealed no significant lesion on subsequent follow up. Low squamous intraepithelial lesion was observed in 1.7% of atypical squamous cells of undetermined

significance and in 5.4% of atypical squamous cells-cannot exclude high squamous intraepithelial lesion. High squamous intraepithelial lesion was demonstrated in 0.8% of the former and in 16.1% of the latter in which there was also one case of invasive carcinoma. High-risk HPV DNA was demonstrated in 40% of atypical squamous cells of undetermined significance and 57.1% of atypical squamous cells-cannot exclude high squamous intraepithelial lesions.

Conclusions: Since both atypical squamous cells of undetermined significance and atypical squamous cells-cannot exclude high squamous intraepithelial lesion identify patients who are at an increased risk for the development of high squamous intraepithelial lesions and a considerable percentage harbor high risk-HPV, both should be retained as diagnostic categories and patients warrant a diligent follow up, and testing for High risk-HPV DNA. Colposcopic evaluation and biopsy, when indicated, are a must.

Keywords: Pap smear. ASCUS, ASC-H, High-risk HPV-DNA

- **Histopathological and Immunohistochemical Approach for Characterization of Undifferentiated Malignant Tumors**

Intisar S. Pity

Jabhs, 2011;12(2): 49-57

ABSTRACT

Objective: To determine the role of immunohistochemistry in characterization of undifferentiated malignant tumors.

Methods: Immunohistochemical staining (IHC) performed was Streptavidin-biotin method on paraffin sections, using mono- or polyclonal antibodies and kits manufactured by DAKO Corporation (Dako, Denmark A/S). The technique was applied on 127 cancer cases reported as undifferentiated malignant tumors over a 12 month period, from July 2008 to August 2009.

Setting: Department of histopathology, Central Laboratory, Duhok/Iraq

Results: Undifferentiated malignant tumors were more frequently located in the respiratory tract 30 (23.6%) followed by the gastrointestinal tract 25 (19.7%), lymph node 19 (14.9%) and bone/soft tissue 19 (14.9%). Among these, 75 (82.7%) cases were primary and 22 (17.3%) metastatic. Application of immunohistochemistry resulted in characterization of 112 (88.2%) cases. Non-Hodgkin lymphoma 21 (16.5%) was at the top of the diagnosed list followed by adenocarcinoma 20 (15.7%), sarcoma 17 (13.4%), and small undifferentiated carcinoma 15 (11.8%).

Conclusion: Immunohistochemistry is a very helpful tool for characterization of undifferentiated malignant tumors.

- **Characterization of Undifferentiated Malignant Spindle Cell Tumors, a Practical Immunohistochemical Study in Kurdistan Region, Iraq.**

Intisar S. Pity, Jalal A. Jalal, Sarbar M. E. Napaki

Jabhs, 2012

ABSTRACT

Objective: To evaluate the role of immunohistochemistry in characterization of undifferentiated malignant spindle cell tumors in Kurdistan Region, Iraq.

Materials and Methods: The study extended from April 2008 to June 2010. Overall, 102 cases were reported as undifferentiated malignant spindle cell tumors in the histopathology departments of Kurdistan Region, Iraq. Immunophenotyping done was Streptavidin-biotin method on paraffin sections.

Results: In the studied sample, malignant spindle cell tumors were more frequently located in the bone and soft tissue (28.4%), followed by gastrointestinal tract (17.6%) and respiratory tract (12.8%). Female genital tract formed (9.8%), central nervous system (7.8%), urinary tract (5.9%), lymph node (4.9%) and skin (3.9%). The remainder (8.6%) was miscellaneous. Sarcoma group was at the top of the diagnosis list and the main bulk (50%) followed by sarcomatoid carcinoma (10.8%), gastrointestinal stromal tumor (7.8%) and melanoma (6.9%). Glioblastoma multiforme, malignant meningioma and mesothelioma were diagnosed in 2.9% of cases each while monophasic Wilm's tumor, yolk sac tumor and carcinosarcoma were found in 1.9% of cases each.

Conclusion: Immunohistochemistry is a very helpful ancillary tool in characterization of undifferentiated malignant spindle cell tumors in our locality. A combination of clinico-pathological correlation and immunophenotyping resulted in characterization of most challenging cases. However, a small percentage still remains uncharacterized and requires more sophisticated techniques for final diagnosis.

Key Words: Malignant spindle cell tumors. Characterization. Immunohistochemistry

- **Angiogenesis, p53 and Bcl₂ in Colorectal Carcinoma**

Intisar Salim Pity, Sardar Hassan Arif, Djwar Ali Hadji

IJOART, Volume 2, Issue 3, March 2013

ABSTRACT

This study was an attempt to evaluate, immunohistochemically, the angiogenesis activity as well as the expression of p53 and Bcl₂ proteins in

patients on a series of 52 cases of surgically operated colorectal adenocarcinoma. The angiogenic activity was assessed based on microvessel density using CD34 marker while the expression of p53 and Bcl₂ proteins was studied by using monoclonal antibodies. Active angiogenesis was demonstrated in 61.5% of cases while p53 expression was observed in 46.2% of cases; both were significantly higher than Bcl₂ expression (9.6%). On the other hand, none of active angiogenesis, p53 expression or Bcl₂ expression had any significant association with the clinicopathologic findings despite a trend showing a decrease toward right sided colon cancers and with worsening of both histological grade and tumor stage. In conclusion, colorectal carcinoma is associated with active angiogenesis and increased p53 expression compared with Bcl₂, but their potential use in the clinical setting appears to be of limited value.
Keywords: Angiogenesis, p53, Bcl₂, colorectal carcinoma.

- **Identification of Helicobacter Pylori in Gastric Biopsies of Patients with Chronic Gastritis, Histopathological, Immunohistochemical Study**

Intisar S. Pity, Azad M Baizeed
Dohuk Medical Journal, 2011;5(1):69-77

ABSTRACT

Background and objective: Different methods have been used for detection of Helicobacter pylori in patients with chronic gastritis but a little has been written about immunohistochemistry. The study done was to identify Helicobacter pylori in gastric biopsies of patients with chronic gastritis using the routine stains and immunohistochemistry.

Methods: In a twelve month period, from April 2008 to May 2009, 105 cases of chronic gastritis were studied. The routine hematoxylin and eosin stain and modified Giemsa stains "Sheehan's modified may method" and immunohistochemistry "automated staining machine from Ventana Company" were performed.

Results: Chronic gastritis cases (n=105) included 35 (33.3%) mild, 51 (48.6%) moderate, and 19 (18.1%) marked inflammation. Active form gastritis was accounted in 76 (72.4%) cases, glandular atrophy in 40 (38.1%) cases, and intestinal metaplasia in 19 (18.1%) cases. The routine hematoxylin- eosin and modified Giemsa stains gave 20 (19%) false positive and 13 (12.4%) false negative results. The sensitivity and specificity of the routine stains were 77.6% and 57.4% respectively while their positive and negative predictive values were 69.2 and 67.5 % respectively with 68.6% accuracy.

Conclusions: Although Helicobacter pylori can be readily demonstrated by the routine hematoxylin-eosin/modified Giemsa stains, the high rates of false negative and false positive results necessitate the routine application of immunohistochemistry for all chronic gastritis cases.

Key words: Helicobacter pylori, chronic gastritis, immunohistochemistry.

- **Expression of Ki-67 and p53 in Oral Squamous Epithelial Abnormalities**

- **Intisar S. Pity, Jalal A. Jalal**

Babil Medical Journal. 2013;10(1)

Abstract

Objective: We intended to study the cellular proliferation by a means of Ki-67 labeling index and the overexpression of p53 in a series of 35 oral intraepithelial lesions and squamous cell carcinoma to evaluate the potential association between their histologic grades and the expression of the two markers. The expression of both markers on sections taken from hyperplastic and normal mucosal epithelium was also evaluated in order to determine whether the combination of p53 and Ki-67 overexpression could be used as a diagnostic aid in evaluating oral biopsies.

Methods: Archival biopsy specimens from 35 patients with oral squamous cell carcinoma (n=19) and intraepithelial lesions (n=16) were retrieved, and from the same patients, 13 blocks with hyperplastic epithelium and other 7 with normal mucosal epithelium were also taken out. The Ki-67 labeling index and p53 overexpression were determined by immunohistochemistry on paraffin sections, using avidin–biotin technique, and antigen retrieval was done by a pressure pot.

Results: Overall, the staining patterns for Ki-67 antigen and p53 were similar. High Ki-67 and p53 overexpressions were observed in 52.6% and 63.2% of carcinoma cases respectively, in 62.5% and 56.3% of intraepithelial lesions respectively, in 23.1% and 15.4% of hyperplastic epithelium respectively, and nearly none in benign epithelium. Both high Ki-67 labeling index and p53 overexpression were significantly higher in carcinoma and intraepithelial lesions compared with hyperplastic epithelium. These high indices were associated with graded carcinoma and intraepithelial lesions.

Conclusions: Combination of p53 and Ki-67 overexpressions can be used as specific markers for oral lesions that are probably at high risk for malignant transformation. Their immunohistochemistry emerges as a clinically useful supplement for histopathological assessment of grading of oral squamous cell carcinoma and intraepithelial lesions.

Key words: Ki-67, p53, oral intraepithelial lesion, oral squamous cell carcinoma

- **Central Nervous system tumors. A clinicopathological study.**

Intisar S. Pity

J. Dohuk Univ., Vol. 11, No.1, 2008

ABSTRACT:

A total of 127 patients from Ibn-Sina Mosul hospital with central nervous system tumors were evaluated clinically and by imaging techniques, using magnetic resonance image (MRI) and computed tomography (CT-scan), followed by intraoperative cytological examination and then histopathological evaluation of the resected tumor tissues. The aims of the study were histopathological diagnosis and typing of CNS tumors and assessment of the possible diagnostic roles of cytology and the available imaging techniques.

Results: Patients ages ranged from 3-72 years with a mean age of 40 years and a male to female ratio of 1.6:1. Majority had intracranial tumors (91.3%). Parietal lobe (21%) was the predominant affected region. Majority of the tumors were malignant (61.4%). Astrocytomas (44.1%) were the commonest tumors, followed by meningiomas (24.4%). Cytology was found to be a valid supplementary diagnostic procedure to the available histologic tests for a rapid intraoperative diagnosis. The accuracy rate of cytology was 87% with a sensitivity of (92.6%) and a specificity of (100%), while the accuracy rate of imaging techniques was 69.3%.

- **Synovial Sarcoma of the foot**

- **Intisar S. Pity**

Dohuk Medical Journal 2008;2:141-145

ABSTRACT

Synovial sarcoma is a rare soft tissue sarcoma in the foot. It is commonly localized in the extremities, especially the lower thigh and knee areas. The histopathological, immunohistochemical, and cytogenetic findings of a foot synovial sarcoma are described In 20 cases.

Intisar Salim Hasan Pity

Professor (MBChB. MSc. FIBMS.), Department of pathology, Faculty of Medical Science, School of Medicine, University of Duhok, Duhok, Iraq (<intisarsalimpity@gmail.com>