J Clin Exp Pathol 2015, 5:3
http://dx.doi.org/10.4172/2161-0681.S1.017

OMICS International
conferenceseries.com

4th International Conference and Exhibition on
Pathology
July 13-15, 2015 New Orleans, USA

Comparison of liquid based cytology with conventional cytology in the evaluation of abdominal masses

Rautela A, Choudhury M, Roy Choudhury S, Kumar A and Narula MK
Lady Hardinge Medical College, India

The role of liquid based cytology was compared to conventional preparations cytology in the evaluation of ultrasound guided fine needle aspirates of abdominal lumps. 30 patients presenting with abdominal masses were aspirated. The material was processed conventionally and residual material was rinsed into Cytolyt for liquid based cytologyby Thin Prep method and into cell block fluid. The smears prepared from both the methods were compared by two independent pathologists and were compared for adequacy, cellularity, architectural pattern, cytoplasmic and nuclear preservation, background, presence of non epithelial elements and overall diagnostic accuracy. There was no statistically significant difference in adequacy of material (p value=0.112). Cellularity was more often higher in conventional smears than on Thin Prep slides (p value=0.025). Recognition of architecture was better on conventional smears (p value=0.001). Cytoplasm was better preserved on conventional smears (p value=0.001) but difference in preservation of nuclear details was not statistically significant on slides prepared from both the techniques. The background of Thin Prep slides are significantly cleaner than direct smears (p value=0.001). Non epithelial elements like mucin and neurofibrillary tangles were better preserved on direct smears (p value=0.001) but diagnostic accuracy for both the methodologies showed no statistically significant difference (p value=0.226). The Thin Prep technique utilizes expensive equipment and reagents and also generates certainmorphological artifacts in slides prepared with which a cytologist needs to get familiar.When used in isolation it may not consistently provide any added advantage in the diagnosis of such lesions and should be used as an adjunct to conventional smears. It may be preferred where material has to be transported or required for ancillary tests.

drarchnarautela@gmail.com

The effect of L-amino acid oxidase on squamous cell carcinoma cell line

Hossam El-Malahy[2], Mohamed S Ayoub[1, 2] and **Moataz M El-Kholy[3]**
[1]King Abdulaziz University, Saudi Arabia
[2]Ain Shams University, Egypt
[3]MSA University, Egypt

Introduction: Head and neck squamous cell carcinoma (HNSCC) accounts for over 90% of all head and neck cancers. L-amino acid oxidases (LAAOs) are widely distributed in the venomous snake families Viperidae, Crotalidae and Elapidae. Several related proteins with LAAO activity have been described that exhibit antimicrobial, anti-neoplastic or apoptosis inducing activity. It is assumed that its general mechanism of toxicity is based on the generation of cytotoxic amounts of H2O2.

Aim: The aim of this study was to determine the anticancer effect of LAAO on HEP-2 cell line after 24, 48 and 72 hours using flow cytometry and real time PCR.

Materials & Methods: HEP-2 cell line is propagated and LAAO is added to the culture medium. The cells were assessed after 24, 48 and 72 hours.

Results: The results of this study showed that LAAO caused apoptosis in HEP-2 cell line. The percentage of apoptosis was directly proportioned with time. The expression of p53 was increased by time while the expression of Bcl-2 decreased by time.

Conclusion: These results indicate that LAAO have a powerful anticancer activity on HEP-2 cell line.

elmalahy61@yahoo.com