


	<p>factors of STZ induced diabetic rats including glucose level AGEs, lipid profile (cholesterol, HDL, LDL, and TG) and CRP.</p> <p><b>MATERIAL AND METHODS</b> Diabetes type1 was induced to Male albino- wistar rats by STZ at a dosage of 50 mg kg-1. 17 rat were divided into three groups randomly including diabetic treated with extract, diabetic control and normal group. Diabetic group were force fed orally by cucurbita extract. The animals were anesthetized with ether at the end of 30 days and the blood was collected by syringe from their hearts for estimation of plasma glucose, TG, HDL, LDL, total cholesterol, CRP and AGEs</p> <p><b>RESULTS</b> After measuring the serum factors and compares the result of the three groups to each other meaningful difference that shows the positive effect of cucurbita extract has been seen.</p> <p><b>CONCLUSION</b> According to the results we suggest that squash extract could have positive effect on regulating some of blood elements like glucose which are under the bad effect of diabetes type1 in rats. But more investigations are needed in this field to demonstrate the real benefits of cucurbita in curing diabetes and its related signs.</p> <p><b>KEYWORDS</b> Plant extract, squash, glucose, rat, cholesterol, triglyceride, diabetes</p>
 <p><b>A.M. Piyumali</b> Sandareka Arachchi YRSB3SC1608051</p>	<p>Association of Helicobacter pylori infection and virulence factors with selected Human Leukocyte Antigen-DQA1 and -DQB1 alleles among dyspeptic patients</p> <p><b>M. P. S. Arachchil</b> Department of Microbiology, Faculty of Medical Sciences, University of Sri Jayewardenepura, Gangodawila, Nugegoda, Sri Lanka <a href="mailto:piyumalisandareka@gmail.com">piyumalisandareka@gmail.com</a></p> <p><b>M. M. Weerasekera1</b> Department of Microbiology, Faculty of Medical Sciences, University of Sri Jayewardenepura, Gangodawila, Nugegoda, Sri Lanka <a href="mailto:mmweera@sjp.ac.lk">mmweera@sjp.ac.lk</a></p> <p><b>S. S. N. Fernando1</b> Department of Microbiology, Faculty of Medical Sciences, University of Sri Jayewardenepura, Gangodawila, Nugegoda, Sri Lanka <a href="mailto:fneluka@sjp.ac.lk">fneluka@sjp.ac.lk</a></p> <p><b>D. L. N. L. Ubhayawardana</b> Department of Microbiology, Faculty of Medical Sciences, University of Sri Jayewardenepura, Gangodawila, Nugegoda, Sri Lanka <a href="mailto:unushka@yahoo.com">unushka@yahoo.com</a></p> <p><b>K. Samarasinghe</b> Department of Pathology, Faculty of Medical Sciences, University of Sri Jayewardenepura, Gangodawila, Nugegoda, Sri Lanka <a href="mailto:kamani62@yahoo.com">kamani62@yahoo.com</a></p> <p><b>T. D. C. P. Gunasekaral</b> Department of Microbiology, Faculty of Medical Sciences, University of Sri</p>

7th International Conference on Biotechnology, Bio Informatics, Bio Medical Sciences and Stem Cell Applications (B3SC), 11-12 Nov 2016  
Nanyang Technological University, Nanyang Executive Centre, Singapore



Jayewardeneperu, Gangodawila, Nugegoda, Sri Lanka  
[chinthika@sjp.ac.lk](mailto:chinthika@sjp.ac.lk)

**ABSTRACT**

**Aims:** This study aimed to assess association of selected HLA (Human Leukocyte antigen) alleles; HLA-DQA1\*0102, HLA-DQA1\*0103, HLA-DQB1\*0301 with H. pylori infection among a Sri Lankan dyspeptic patient population.

**Methods:** Gastric biopsy specimens from 100 patients who underwent upper gastrointestinal endoscopy at a tertiary care hospital were investigated in this study. Presence of H. pylori was confirmed using histology and PCR. Histological interpretation was done using Modified 'Sydney system'. The presence of HLA alleles and selected virulence genes of H. pylori; cagA, vacA and baba2, were determined using Polymerase Chain Reaction (PCR).

**Results:** Mild to moderate inflammation was observed in 96 biopsy specimens. Alleles, HLA-DQA1\*0102, HLA-DQA1\*0103, HLA-DQB1\*0301 was seen 39%, 31% and 20% respectively in the 100 dyspeptic patients. Out of 25 H. pylori confirmed patients (by PCR or histology), 56% (14/25), 36% (9/25) and 12% (3/25) were positive for HLA-DQA1\*0102, HLA-DQA1\*0103 and HLA-DQB1\*0301 alleles respectively. Out of 22 H. pylori PCR positive biopsies, one was positive for cagA with vacA s2/m1 strain type, 7 were positive for baba2 and histological examination revealed mild to moderate inflammation. H. pylori infection showed significant association with HLA-DQA1\*0102 (p=0.044) and inflammation (p=0.030). HLA-DQA1\*0103 and HLA-DQB1\*0301 showed no significant association with either H. pylori infection, inflammation or the presence of virulence genes.

**Conclusion:** HLA-DQA1\*0102 allele has a significant association with H. pylori infection while HLA-DQA1\*0103 and HLA-DQB1\*0301 shows no significant association in a Sri Lankan dyspeptic patient population.

**Keywords –** Dyspepsia, Human Leukocyte Antigen, HLA-DQ, Helicobacter pylori, virulence genes.



Mohd Anas Shamsi  
YRSB3SC1608052

**Structural transition of kidney cystatin in dimethylnitrosamine-induced renal cancer in rats: identification as a novel biomarker for kidney cancer and prognosis**

Anas Shamsi

Faculty of Life Science, Department of Biochemistry, Aligarh Muslim University,  
Aligarh 202002, India  
[anas.shamsi18@gmail.com](mailto:anas.shamsi18@gmail.com)

Azaj Ahmed

Faculty of Life Science, Department of Biochemistry, Aligarh Muslim University,  
Aligarh 202002, India

Bilqees Bano

Faculty of Life Science, Department of Biochemistry, Aligarh Muslim University,  
Aligarh 202 002, India

**ABSTRACT**

In our study, renal cancer is induced in rats making use of dimethylnitrosamine

7th International Conference on Biotechnology, Bio Informatics, Bio Medical Sciences and Stem Cell Applications (B3SC), 11-12 Nov 2016  
Nanyang Technological University, Nanyang Executive Centre, Singapore