contain a variable length fatty acid linked to sphingosine or a related long chain base. In addition to its structural role in the metabolism of membrane building blocks such as sphingomyelin, ceramide plays a critical role in trans-membrane signaling, particularly in response to stress eliciting the pathway involving p33 and ceramide in the response of solid cancers to hypoxia, in order to elaborate novel therapeutic strategies for accompanied by p33 overexpression and early ceramide accumulation. However, in the absence of p33, HCT 116 cells were unable to arrest response of cancer cells to hypoxia is crucial for the development of novel therapeutic strategies for p33-mutated solid tumors.

Morphological Changes of Grafts in Patients Who Died after Coronary Artery Bypass Graft Surgery from Isolated Coronary Heart Disease and Associated with Hypertensive Heart Disease

Ruzanna Petrosyan (Beirut Arab University, Lebanon)

Objectives: Vascular graft failure is one of the most common finding in patients undergoing coronary artery bypass graft (CABG) surgery and still grafts after CABG in patients with isolated coronary artery disease and associated with hypertensive disease. Material and Methods: It is shown that the condition of the vascular wall is depend on hemodynamics leading to degenerative changes of the graft as a result of destructive and connective tissues leads to thickness of the vascular wall, stenosis on one hand and on the other hand development of unstable atheromatosous plaques associated with hypertensive heart disease were more acute with more aggressive course of atherosclerotic changes with diffuse proliferation of unstable plaques.

Hypoglycemia induces vascular remodeling through modulation of leptin and adiponectin synthesis

Ola El Atab and Ola El Atab (AUB and LU, Lebanon)

Background and Aims: Cardiovascular disease is considered a major cause of death in the diabetic population. Detrimental effects of hypoglycemia are well demonstrated especially those related to vascular damages. Moreover, many recent studies have highlighted the association between vascular complications in diabetes and two adipocytokines: leptin and adiponectin (APN). APN exerts protective effects on vascular remodeling while vasodilators, mediated by APN and leptin synthesis in vascular smooth muscle cells (VSMC). Methods and Results: Rat aorta organ culture pathway and cavocele in this expression. Moreover, the impacts of hypoglycemia on reactive oxygen species (ROS) production and changes in actin hyperglycemia leads to an increase in APN endogenous protein expression in VSMC, which was prevented by 1 hour pretreatment with the ROCK inhibitor Y-27632 and the cholesterol depleting agent methyl β-cyclodextrin (MC2D). However, the increase in APN synthesis fails to provide vascular protein synthesis in VSMCs at early stage (1 hour) through Rhod/ROCK pathway and cavocele, and at late stage (24 hours). Moreover, results and leptin antibody. However, the 1 hour of pre-treatment with APN significantly reduced hypoglycemia-induced ROS production while the disruption of expression in VSMCs was assessed by western blot. Results revealed a significant increase in NADPH oxidase (NOX4) protein hyperglycemia. In order to investigate the association between NOX activity and APN synthesis, aortas were pre-treated for 1 hour with the NOX inhibitor apocynin then incubated for 24 hours in high glucose conditions. This treatment significantly decreased hypoglycemia-induced APN expression in VSMCs. In addition, the effect of hypoglycemia on actin cytoskeleton remodeling was also investigated. Hypoglycemia for 24 hours significantly inhibited the polymerization of globular actin into filamentous actin but no inhibition was detected following the pretreatment with APN. Moreover, Q-PCR revealed that 24 hours of exposure to hypoglycemia significantly increased Cyclin A mRNA expression. Finally, pre-treating aortas with MC2D didn't inhibit hypoglycemia-induced actin cytoskeleton remodeling but the inhibition of Cyp-A4 by cyclosporin A prevent this.

The natriuretic system in human salivary gland health and disease: potential use to diagnose early stages of malignancy in salivary glands

Angelo Leone (University of Palermo, Italy)

Angelo Leone, 1 BiocNeC, Section of Histology, Palermo University School of Medicine, Palermo, Italy 2 Tumour Immunology Unit, Human Pathology Section, King's College, London, UK. The natriuretic peptide system comprises three ligands - atrial natriuretic peptide (ANP), brain natriuretic peptide (BNP) and C-type natriuretic peptide (CNP) - and three receptors, NPR-A, NPR-B and NPR-C. Although the heart is the major source of ANP and BNP production of ANP has been reported in a number of extra cardiac sites including the salivary glands (SGs). Our immunohistochemical studies show all the blood vessels walls and the peripheral nervous system. It is the first time the natriuretic peptide system is shown to be expressed in the peripheral function, possibly as a neurotransmitter or neuromodulator during SG homeostasis. We further identified NPR-A expression was elevated in the advanced primary OSCC, suggesting high NPR-A levels could be used to diagnose early stages of malignancies in SGs.

Correlates of drug resistant infections in Lebanon: A multicenter retrospective study

Roula Matta and Souheil Hallit (Lebanese University, Lebanon); Rabih Hallit (UZ, Lebanon); Anne-Marie Rognes (Université de Bordeaux, France); Pascale Salameh (Lebanese University, Lebanon)