

CHAPTER 36

MEDICAL SCIENCES MEDICINE

Doctoral Theses

447. POLIPALLI (Sunil Kumar)
Molecular Epidemiology of Pancreatic Cancer in North Indian Population.
Supervisors : Dr. Premashis Kar, Dr. Anil Agarwal, Dr. Ranjana Gondal and Dr. Syed Akhtar Husain.
Th 16739

Abstract

Shows evidence of p16 methylation and mutation of K-ras gene to be statistically higher in pancreatic cancer compared to chronic pancreatitis and this suggests that inactivation of cell cycle regulator and tumor suppressor p16 and k-ras gene represent a critical early step in the genesis of pancreatic cancer. Expression profile of p16 showed hypermethylation in moderate and well differentiated cases and it was also observed in k-ras mutated cases. K-ras expression did not show any correlation with differentiation and tumor location while it was observed to be higher in p16 methylated cases and k-ras mutated cases. In this study age and smoking were found to be statistically higher in pancreatic cancer than chronic pancreatitis.

Contents

1. Introduction. 2. Review of literature. 3. Aims and objectives. 4. materials and methods. 5. Results. 6. Discussion. 7. Summary. 8. Conclusion. Bibliography and appendix.
448. SIDDIQUI (Azaz Ahmad)
Role of Stress and Stress Related Physiological Response Markers in the Development of Type 2 Diabetes Mellitus.
Supervisors : Dr. S. V. Madhu and Dr. S. B. Sharma
Th 16715

Abstract

Assesses environmental stress through stress scales comprising of presumptive stressful life events (PSLES), major stressful life events (MSLES), perceived stress scale (PSS) and sense of coherence (SOC) and through measurement of stress response markers cortisol and prolactin in 100 NGT subjects and 100 newly detected diabetes mellitus (NDDM) subject in a case control design. The results indicate that NDDM subjects display higher chronic environmental stress and poor stress coping that could lead to central adiposity, insulin resistance, pancreatic beta cell dysfunction and glucose intolerance. The effects of stress appear to be mediated by chronically activating the HPA axis and through oxidative stress pathway. These findings provide evidence and support for a significant role of stress in the development of type 2 diabetes mellitus.

Contents

1. Introduction. 2. Review of literature. 3. Lacunae. 4. Aims and objectives. 5. Relevance of this study. 6. Material and methods. 7. Results. 8. Discussion. Summary and Conclusions. Bibliography.