



Keywords: Hyperglycemia; Diabetes Mellitus; Obesity; Pancreatitis

Introduction

Hyperglycemia can be brought on by a variety of illnesses, such as diabetes mellitus, obesity, pancreatitis, chronic stress, and cancer [4]. It is interesting to note that the epidemiological data now available suggests that all of these hyperglycemia-related disorders are probably linked to carcinogenesis or tumour growth. The effects of hyperglycemia on the heart, kidneys, nerves, and eyes are now the primary areas of investigation; the effects of hyperglycemia on cancer have received minimal attention [5]. The link between hyperglycemia and cancer should get considerable attention given the frequency of hyperglycemia-related disorders found in cancer patients. The DM is the most typical medical disorders that cause hyperglycemia [6].

Discussion

Blood sugar levels rise in people with diabetes mellitus either as a result of low insulin levels or poor insulin utilisation [7]. 347 million people worldwide now have diabetes mellitus, and this figure is expected to rise. Epidemiologic research has previously indicated that patients with diabetes have a greatly increased chance of developing a variety of cancers. Diabetes has been linked to the emergence of solid organ malignancies, such as liver, pancreas, colorectal, breast, endometrial, and bladder cancers [8]. Liver cancer and pancreatic cancer among them have the highest correlation with DM2. 23 articles from a recent meta-analysis showed a 41% rise in cancer mortality as a result of Compared to people without diabetes, patients with pre-existing diabetes had higher rates of endometrial, breast, and colorectal cancer [9]. As a result, there is strong evidence from several researches linking diabetes to a higher chance of developing cancer [10]. Contrarily, diabetes is more common among cancer patients than in the general population; as a result, newly developed diabetes may be a precursor to subclinical cancer. Following the discovery of hyperglycemia in cancer patients in 1885, Warburg et al. in the journal Cancer Research revealed that tumour tissues sustained greater rates of glucose consumption than normal cells. Various cancer patients have been studied in several clinical investigations to look for evidence of changes in carbohydrate metabolism. The clinical findings suggested a link between neoplasia and concurrent glucose problems. Metabolism additionally, other groups have revealed particular molecular pathways linked to the absorption of glucose in cancerous cells. Fluodeoxyglucose absorption is elevated in the majority of malignant tissues and is accompanied by

accelerated glycolysis and glucose transport. The proliferative activity of malignant tissue and the quantity of live tumour cells are complexly connected to the rise in 18F-FDG absorption seen in malignant tissue.

Conclusion

A growing body of data points to a strong connection between diabetes and a number of cancers, but the underlying biological

Conflict of Interest

None

References

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