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|  | **DIETARY MANAGEMENT OF**  **PANCREAS TRANSPLANTATION** |
| **Made by GHILMAB MOBEEN on April 24, 2012 as a part of course no \_\_\_\_Of BS HE under the guidance of Prof. Dr. Rubina Hakeem (RH)** |

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| **DESCRIPTION OF THE DISEASE/ DISORDER**  **WHAT IS PANCREAS???**  The pancreas is a gland that lies to the rear of the other abdominal organs. The head is to the right below the Liver. One of its main functions is to make Insulin, a hormone that regulates the absorption of sugar (glucose) into your cells. When pancreas cannot produce enough insulin, Type I diabetes occurs. |
| **CAUSES OF THE DISEASE/ DISORDER**  **WHEN IS THE PANCREAS TRANSPLANTATION DONE???**  Pancreas transplants are performed on individuals with Type I diabetes. It is indicated for patients with frequent, acute and severe metabolic complications requiring medical attention, severe clinical and emotional problems with exogenous insulin therapy, and consistent failure of other therapeutic options. |
| **NUTRITIONAL CONSIDERATIONS**   * **PROTEINS:** * A high-calorie, high-protein snacks will help meet the increased requirements following surgery. * **FATS:** * Generally, a moderate, sodium-restricted, low-saturated fat, low-cholesterol diet is recommended. * Avoid high amounts of fat and select healthy cooking methods as baking, grilling, steaming and poaching and avoid deep frying. * Select low-fat dairy products. * **CARBOHYDRATES:** * Eat a balanced diet with plenty of fresh and canned fruits and vegetables, cooked grains and cereals. * **FIBER:** * Avoid high amounts of fiber including legumes, nuts and whole grain cereals. * **VITAMINS:** * No specific recommendations. * **MINERALS:** * No specific recommendations. * **FLUID REQUIREMENTS:** * Drink plenty of water 4 L/day along with dietary sodium at least 4g/day based on replacement needs. * Use of sports drink may be helpful for some patients. * **ENERGY REQUIREMENTS:** * Regular exercise should be encouraged for long-term maintenance of energy. |

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| **DIETARY CONSIDERATIONS** **DURING COMPLICATIONS FOLLOWING PANCREAS TRANSPLANTATION** | | |
| **GASTROPARESIS/ILEUS** (Delays in gastric emptying or return of bowel motility) | | |
| **Do’s** | **Moderation** | **Don’ts** |
| * Nutrition support using feeding tube is encouraged. * If oral diet is possible, a low-fat, low-fiber, small and frequent feeding may be prescribed. | **(NA)** | **(NA)** |
| **PANCREATIC** **FISTULAS** (Leakage of pancreatic secretions) | | |
| **Do’s** | **Moderation** | **Don’ts** |
| * Protein & high-calorie supplements may be useful. * Oral fluids and electrolytes are encouraged to replace the losses. | **(NA)** | **(NA)** |
| **PANCREATITIS** (Inflammation of the native pancreas) | | |
| **Do’s** | **Moderation** | **Don’ts** |
| * If no pain, nausea or vomiting, a low-fat, high-protein diet is indicated to take orally. * If tube feedings are necessary, a low-fat, elemental formula may be indicated. | **(NA)** | **(NA)** |
| **HYPERGLYCEMIA** (high blood sugar) | | |
| **Do’s** | **Moderation** | **Don’ts** |
| * Carbohydrate-controlled diet or tube feeding are indicated * Frequent feedings and Oral supplements may be helpful when patient’s appetite is poor. | **(NA)** | **(NA)** |
| **OBESITY** | | |
| **Do’s** | **Moderation** | **Don’ts** |
| * Reduction in total kilocalories with increased exercise should be encouraged. | **(NA)** | **(NA)** |
| **HYPERTENSION** (high blood pressure) | | |
| **Do’s** | **Moderation** | **Don’ts** |
| * A sodium-restricted diet may be recommended for long-term blood pressure management. | **(NA)** | **(NA)** |
| **OSTEOPOROSIS** | | |
| **Do’s** | **Moderation** | **Don’ts** |
| * Intake of calcium and vitamin D should be encouraged along with weight bearing exercise, such as walking, to decrease the risk of developing osteoporosis. | **(NA)** | **(NA)** |
| **FOOD AND DRUG/ DISEASE INTERACTIONS ORTREATMENT SIDE EFFECTS**   * Presence of certain foods, particularly high-fat foods, decreases both the rate and amount of medicine absorbed. * Side effects include; hypertention, hyperkalemia, hypomagnesemia, hyperlipidemia, glucose intolerance, mild iron deficiency anemia, nausea, vomiting, abdominal pain, diarrhea, hiccups and abdominal discomfort. | | |
| **References used:**   1. Manual of Clinical Dietetics (American Dietetic Association,ed. 6th) 2. Nutrition Care Manual (NCM) | | |
| **Sources of further information:**  NO | | |