

glomerulosclerosis. Insulin resistance (IR) accelerates structural changes and thr' Angiotensin II so increased collagen production and deposition.

DIRECT COST OF CHRONIC DISEASES IN THE UNITED STATES

It is estimated that obesity accounts for 6% of the nation's total healthcare expenses, with \$51.6 billion/year in direct costs and over \$100 billion/year in both direct and indirect costs²¹⁻²². Direct costs include the costs of personal health care, hospital care, physician services, allied health services, and medications. Indirect costs include the value of lost productivity from illness or premature mortality. The estimated direct cost of obesity is comparable to that of other prevalent, chronic diseases, such as type 2 diabetes and coronary heart disease, and is more costly than both hypertension and stroke. Moreover, obesity contributes to the development of other chronic diseases; it is estimated that 61% of the direct cost of type 2 diabetes, 17% of the direct cost of coronary heart disease, and 17% of the direct cost of hypertension are attributable to obesity.

CONCLUSION

Overweight/obesity is a disease process but needs to be publicized and effort needs to be made by policy makers. Main mortality comes from associated metabolic syndrome leading on to DM, CHD, Stroke, cancer etc. It is a systemic disease affects most of systems. Recent studies have shown that obesity is emerging as a risk factor for renal dysfunction. The silver line in the obesity related complications is that by reducing weight most of the complications can be reversed.

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DRUG PROFILE

SITAGLIPTIN PHOSPHATE

Mechanism of Action: Sitagliptin phosphate is orally-active selective inhibitor of the dipeptidyl (DPP-4) enzyme for the treatment of type 2 diabetes. (DPP-4) inhibitors are a class of agents that act as incretin enhancers. By inhibiting the (DPP-4) enzyme, sitagliptin increases the levels of two known active incretin hormones, glucagons-like peptide-I (GLP-1) and glucose – dependent insulinotropic polypeptide (GIP). The incretins are part of endogenous system involved in the physiologic regulation of glucose homeostasis, increase insulin synthesis and release it from pancreatic beta cells, GLP-1 also reducing glucagon secretion from pancreatic alpha cells, leading to reduced hepatic glucose production. **Indications:** The drug is indicated as an adjunct to diet and exercise to improve glycemic control in combination with metformin, sulfonylurea, thiazolidendiones. **Dosage and Administration:** The recommended dose is 100 mg once daily as monotherapy, as combination therapy with metformin sulfonylurea and can be taken with or without food. For patients with mild renal insufficiency (creatinine clearance (CrCl) > 50ml/min, no dosage adjustment is required; Moderate renal insufficiency CrCl>30 to <50ml/min. the dose is 50 mg once daily in severe renal insufficiency (CrCl<30mL/min, is 25 mg once daily hence, an assessment of renal function is recommended prior to initiation and periodically thereafter. The drug is not recommended for use in patients with type 1 diabetes or for the treatment of diabetic ketoacidosis. **Hypersensitivity reactions:** include anaphylaxis angioedema, exfoliative Stevens Johnson. The drug is generally well tolerated; gastrointestinal side effects noticed are abdominal pain (2-3%), nausea (1.4%), vomiting, diarrhea(3.0%). **Pregnancy:** There are no adequate and well controlled studies in pregnant women, therefore safety in pregnant women is not known Sitagliptin is secreted in the milk of lactating rats, should not be used in nursing mother. **Pediatric:** safety and effectiveness in children under 18 years have not been established. No dosage adjustment is required and is generally well tolerated in the elderly.