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HCV cost effectiveness model

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Hepatitis C is thought to infect 3-5 million Americans, frequently resulting in cirrhosis and related diseases. The treatment up until recently had been based on interferon and ribavirin with efficacy rates of under 40% for most patients, much lower on an intention to treat basis. Several new oral anti-viral treatments have been developed and approved, now with efficacy rates of 90-99%. Treatment costs have been controversial with per pill prices set at \$1,000-\$1,125. We set out to examine the cost effectiveness of these new treatments. Life expectancy is estimated to improve 15 years in patients cured with early disease; this is reduced in patients with advanced disease. The model incorporates the observation of log-rhythmic increase in mortality as cirrhosis occurs. The HCV Medical Treatment Model predicts a cost of \$6,467 per year of life saved for patients treated with no cirrhosis. The same model calculates a cost \$160,500 per year of life saved for patients with advanced cirrhosis. The current benchmark of cost per year of hemodialysis is \$72,000-89,000. The model suggests patients with early HCV disease are cost effective to treat with the most current medical treatment regimens, but not so for patients with cirrhosis.

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Protective effect of *Bauhinia tomentosa* on acetic acid induced ulcerative colitis by regulating antioxidant and inflammatory mediators

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Inflammatory bowel diseases (IBD), including Crohn's disease and Ulcerative colitis (UC), are life-long and recurrent disorders of the gastrointestinal tract with unknown etiology. The present study is designed to evaluate the ameliorative effect of *Bauhinia tomentosa* during ulcerative colitis (UC). Three groups of animals (n=6) were treated with *B. tomentosa* (5, 10, 20 mg/kg B.wt respectively) for 5 consecutive days before induction of UC. UC was induced by intracolonic injection of 3% acetic acid. The colonic mucosal injury was assessed by macroscopic scoring and histological examination. Furthermore, the mucosal content of lipid peroxidation (LPO), reduced glutathione (GSH), nitric oxide (NO), glutathione peroxidase (GPx) and superoxide dismutase (SOD) activity confirms that *B. tomentosa* could significantly inhibit colitis in a dose dependent manner. The myeloperoxidase (MPO), tumor necrosis factor (TNF- α), inducible nitric oxide synthase (iNOS) expression studies and lactate dehydrogenase (LDH) assay also supported that *B. tomentosa* could significantly inhibit experimental colitis. The effect was comparable to the standard drug sulfasalazine. Colonic mucosal injury parallels with the result of histological and biochemical evaluations. The extracts obtained from *B. tomentosa* possess active substances, which exert marked protective effects in acute experimental colitis, possibly by regulating the antioxidant and inflammatory mediators.

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