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GRAPEFRUIT ALCOHOLIC SEED EXTRACT EFFECT ON CANDIDA ALBICANS RESISTANT TO FLUCONAZOLE AND CLOTRIMAZOLE

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Grapefruit Seed Extract (GSE) has been shown to possess antibacterial, antiviral, antifungal and antiparasite properties. It contains large quantities of polyphenolic compounds, such as catechins, epicatechin, epicatechin-3-O-gallate, dimeric, trimeric and tetrameric procyanidins. These beneficial actions of GSE have partly been attributed to the antioxidative activity of citrus flavonoids, such as naringenin. In the current study, the efficacy of GSE on *Candida albicans* resistant to Clotrimazole and fluconazole, collected from vaginitis samples was investigated. Vaginal secretions of 100 women with vaginitis referred to health care centers were studied. Tests for microbial diagnosis and common drug resistance to microbial samples were performed. MIC method was compared to Disk diffusion. Also samples were exposed to Grapefruit seed hydroextract in various concentrations supplied with decoction method and grapefruit seed alcohol extract by MIC method. There were 100 samples collected from women aged 20 - 50 years vaginitis was more prevalent in age range 25 - 30 years. Of all samples 40 were candida positive and 60 had bacterial infection. Candida samples mostly resisted to Clotrimazole, of all cases 30% were resistant to clotrimazole and 17.5% to fluconazol. Samples were exposed to hydroextract, no antifungal effect was observed, and also they were exposed to Alcoholic extract, prepared with maceration method, in various concentrations with MIC method. Alcoholic GSE with 10 and 20% had effect on 75% of candida samples resistant to Clotrimazole and fluconazole. Our results suggest that alcoholic GSE could inhibit *Candida albicans* growth significantly ($P < 0.05$); GSE might be used as an effective and safe product for fungal vaginitis.