Dissolution test to compare omeprazole liquid formulations of tablet and capsule

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Omeprazole is usually administered as enteric-coated granules or tablets because of acid-labile characteristic. For children and adult patients who can not swallow, it can be mixed with water or other liquids after capsule is opened or tablet is grinded. This study performed to compare omeprazole liquid formulations of tablet and capsule. Omeprazole 20mg enteric coated granule in capsule were opened and 20mg enteric-coated tablets were grinded to be mixed with sodium bicarbonate solution, orange juice or water. Each liquid formulation was poured into dissolution tester, mixed with first solution(artificial gastric juice; pH 1.2) for two hours, then with second solution(artificial enteric juice; pH 6.8) for thirty minutes. pH was measured at different time for two and half hours. Sample aliquots were mixed with lansoprazole, internal standard, and injected to HPLC system.
As results, pH of sodium bicarbonate solution of omeprazole was significantly higher than that of orange juice or water in first solution (6.15-7.47 vs 1.16-1.23, $p<0.005$). Concentration of omeprazole granule or powder in sodium bicarbonate solution sustained significantly higher than powder in other solution (15.20-19.28 vs 0.30-0.82, $p<0.015$).
In conclusion, water or orange juice should be avoided as diluents because omeprazole is not stable at low pH. Granules from enteric-coated granules from capsule and powder from tablet in sodium bicarbonate solution was stable during dissolution test, which would be appropriate and recommended for patient who can not swallow solid preparations.

[PF1-2] [10/19/2000 (Thr) 10:00 - 11:00 / [Hall B]]

Levodopa response after unilateral Pallidotomy in advanced Parkinson 's disease

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In recent years, unilateral pallidotomy has been used in the symptomatic treatment of patients with advanced Parkinson's disease and motor complications. However, the procedure is being performed in the absence of follow-up data on its retained effects and levodopa response. The purpose of this study was to investigate the levodopa response after unilateral pallidotomy in advanced Parkinson's disease. Fifty patients who had had unilateral pallidotomy for advanced Parkinson's disease were investigated, retrospectively. The study consisted of 23 men and 27 women with a mean age of 58.6 years with mean disease duration of 7.22 years. Clinical evaluation of levodopa response was measured by means of the total levodopa equivalents. There was no statistically significant change in the total dose of levodopa equivalents. The mean total levodopa equivalents decreased from 728.86 mg/day to 611.12 mg/day after the surgery ($p > 0.05$, 95% CI). However, There was no need to increase the levodopa dosage to maintain improvement after pallidotomy in those patients who had previously required increased dosages due to loss of effectiveness of the drug. Also, patients were able to tolerate larger doses because of reduced parkinsonian symptoms. A set of rating scales (Hoehn and Yahr and Unified Parkinson's Disease Rating Scale), and timed tests improved significantly for whom medical therapy has failed ($p < 0.001$, 95% CI). In conclusion, pallidotomy provides a stable levodopa response and is a symptomatic treatment of patients with advanced Parkinson's disease.

[PF1-3] [10/19/2000 (Thr) 10:00 - 11:00 / [Hall B]]

Pneumonia and wound infection following renal transplantation