

Role of *Daucus Carota* in Enhancing Antiulcer Profile of Pantoprazole in Experimental Animals

Syed Mohammed Basheeruddin Asdaq ^{1,*}, Earla Swathi ², Sunil S Dhamanigi ²,
Mohammed Asad ³, Yahya Ali Mohzari ⁴, Ahmed A. Alrashed ⁵, Abdulrahman S. Alotaibi ⁵,
Batool Mohammed Alhassan ⁶ and Sreeharsha Nagaraja ^{7,8}

¹ Department of Pharmacology, College of Pharmacy, AlMaarefa University, Riyadh 13713, Saudi Arabia

² Department of Pharmacology, Krupanidhi College of Pharmacy, Bangalore 560035, India;
emadfaika@gmail.com (E.S.); qualityasdaq@gmail.com (S.S.D.)

³ College of Applied Medical Sciences, Shaqra University, Shaqra 11911 and Saudi Arabia;
basheer_1@rediffmail.com

⁴ Clinical Pharmacy Department, King Saud Medical City, Riyadh 12746, Saudi Arabia; yali2016@hotmail.com

⁵ Pharmaceutical Service Department, Inpatient Pharmacy, King Fahad Medical City,
Riyadh 11525, Saudi Arabia; alarashed@gmail.com (A.A.A.); mhospital1920@gmail.com (A.S.A.)

⁶ Neonatal Intensive Care Unit, AlMoosa Specialist Hospital, Riyadh 36342, Saudi Arabia; batool42@gmail.com

⁷ Department of Pharmaceutical Sciences, College of Clinical Pharmacy, King Faisal University,
Al-Ahsa, 31982, Saudi Arabia; sharsha@kfu.edu.sa

⁸ Department of Pharmaceutics, Vidya Siri College of Pharmacy, Off Sarjapura Road,
Bangalore 560035, India

* Correspondence: sasdaq@gmail.com; Tel.: +966-1-403555-3399



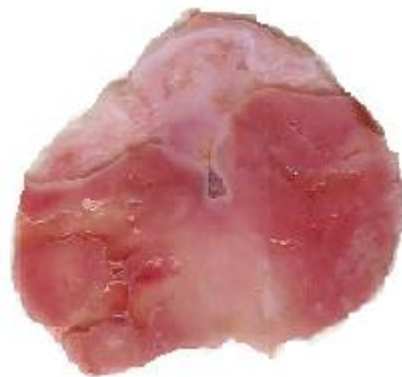
Control



PZL (20mg/kg, p.o.)



LCE (200 mg/kg, p.o.)



HCE (500 mg/kg, p.o.)



LCE+PZL (200 mg/kg, 20 mg/kg, p.o.)



HCE+PZL (500 mg/kg, 20 mg/kg, p.o.)

Figure S1. Photographs showing effect on ulcer healing in acetic acid induced chronic gastric ulcers.



Control



PZL (20 mg/kg, p.o.)



LCE (200 mg/kg, p.o.)



HCE (500 mg/kg, p.o.)



LCE+PZL (200 mg/kg, 20 mg/kg, p.o.)

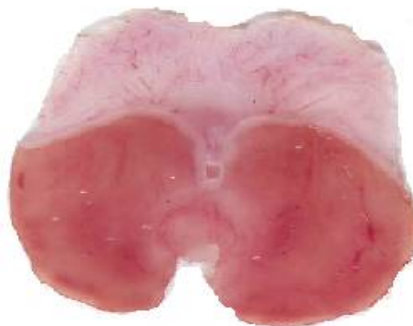


HCE+PZL (500 mg/kg, 20 mg/kg, p.o.)

Figure S2. Photographs showing effect in pyloric ligation induced gastric ulcer



Control



PZL (20 mg/kg, p.o.)



LCE (200 mg/kg, p.o.)



HCE (500 mg/kg, p.o.)



LCE+PZL (200 mg/kg, 20mg/kg, p.o.)



HCE+PZL (500 mg/kg, 20mg/kg, p.o.)

Figure S3. Photographs showing effect in ethanol induced gastric ulcers



Control



PZL (20 mg/kg, p.o.)



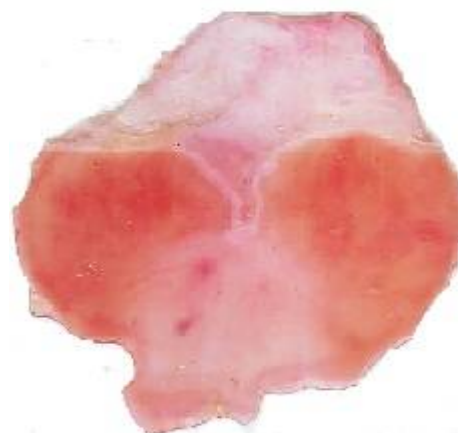
LCE (200 mg/kg, p.o.)



HCE (500 mg/kg, p.o.)



LCE+PZL (200 mg/kg, 20 mg/kg, p.o.)



HCE+PZL (500 mg/kg, 20 mg/kg, p.o.)

Figure S4. Photographs showing effect in stress induced gastric ulcers



Control



PZL (20 mg/kg, p.o.)



LCE (200 mg/kg, p.o.)



HCE

500 mg/kg, p.o.)



LCE+PZL



HCE+PZL

Figure S5. Photographs showing effect in cysteamine induced duodenal ulcers



Control



PZL (20 mg/kg, p.o.)



LCE (200 mg/kg, p.o.)



HCE (500 mg/kg, p.o.)



LCE+PZL (200 mg/kg, 20 mg/kg, p.o.)



HCE+PZL (500 mg/kg, 20 mg/kg, p.o.)

Figure S6: Photographs showing effect in indomethacin induced gastric ulcers

Table S1. Phytochemical investigation for various compounds

SL NO	TEST	INFERENCE	RESULT
1. Test for alkaloids			
1.a	Hager's test	Yellow colour	+
1.b	Dragendroff's test	Orange pricipitate	+
1.c	Wagner's test	Red-brown pricipitate	+
2. Test for carbohydrates			
2a	Molish test	Violet colour	++
2b	Fehling's test	Break red colour	++
2c	Borfoed's test	Red colour	+
2d	Benedict's test	Red colour	+
3. Test for steroids, triterpenoids and glycosides			
3a	Liebermann-buchard test	Reddish- violet colour	++
3b	Salkowski test	Red colour	+
3c	Baljet test	Orange colour	++
3d	Keller killani test	Red colour	+
4. Test for saponins			
4.a	Froth test	1 cm foam	+
5 Test for tannins			
5.a	Ferric chloride test	Blue colour	+
5.b	Lead acetate test	Yellow colour	+
6 Test for proteins and Amino acids			
6.a	Millon's test	Red colour	+
6.b	Biuret test	Violet colour	+
6.c	Ninhydrin test	Violet colour	+
7 Test for flavanoids			
7.a	Ferric chloride test	Blackish red colour	+
7.b	Lead acetate test	Yellow pricipitate	+
8 Test for specific flavanoids			
8.a	Test for carotenoids	Deep blue colour	+
9	Test for phenolic compound	Radish brown colour	+

'+' represents presence of compound, '++' shows more prominence in color formation.