

He-Wei granules inhibit chemotherapy-induced vomiting (CINV) in rats by reducing oxidative stress and regulating 5-HT, substance P, ghrelin and obestatin

Zehai Song^{1,2}, Hang Chang¹, Na Han¹, Zhihui Liu¹, Zhonglin Wang¹, Hao Gao¹, Jun Yin^{1,2*}

¹Development and Utilization Key Laboratory of Northeast Plant Materials, School of Traditional Chinese Materia Medica, Shenyang Pharmaceutical University, Shenyang 110016, China.

²School of Chinese Materia Medica, Guangzhou University of Chinese Medicine.

* Corresponding author

Prof. Jun Yin

School of Traditional Chinese Materia Medica 48[#], Shenyang Pharmaceutical University, Wenhua Road 103, Shenhe District, Shenyang 110016, China

TEL Numb: +86-24-2398-6491

FAX Numb: +86-24-2398-6460

E-mail: yinjun2002@yahoo.com

Supplementary Table S1 Effect of HWKL on kaolin consumptions at different time periods in cisplatin-treated rats ($\bar{X} \pm \text{SEM}$, g)

groups	blank	cisplatin	cisplatin + ondansetron	cisplatin + domperidone	cisplatin + BXXXT	cisplatin + hwkl low dose	cisplatin + hwkl middle dose	cisplatin + hwkl high dose	hwkl
dose		5.0 mg/kg	1.3 mg/kg	3.0 mg/kg	1.38 g/kg	1.18 g/kg	2.36 g/kg	4.725 g/kg	2.36 g/kg
-72h	0.4428 ± 0.05544	1.7916 ± 0.2921	0.6869 ± 0.06425	1.6543 ± 0.08510	0.6832 ± 0.08343	0.3771 ± 0.06601	0.8968 ± 0.1916	0.2849 ± 0.04512	0.5108 ± 0.1002
-48h	0.05141 ± 0.007906	0.09878 ± 0.01135	0.02948 ± 0.01135	0.03692 ± 0.01469	0.02048 ± 0.01354	0.04983 ± 0.001390	0.04420 ± 0.02510	0.03738 ± 0.01271	0.04072 ± 0.01637
-24h	0.03203 ± 0.01132	0.006817 ± 0.003867	0.01900 ± 0.01302	0.01216 ± 0.007730	0.05007 ± 0.02235	0.004083 ± 0.001696	0.002600 ± 0.003932	0.008433 ± 0.007596	0.02928 ± 0.003952
0h	0.001167 ± 0.0004295	0.01718 ± 0.008207	0.1222 ± 0.1131	0.02388 ± 0.01295	0.02423 ± 0.02339	0.03688 ± 0.02583	0.01422 ± 0.003435	0.01852 ± 0.01301	0.007050 ± 0.001255
24h	0.01187 ± 0.006177	6.9167 ± 0.39366 ^d	0.9950 ± 0.08536 ^h	2.5109 ± 0.1382 ^h	3.7351 ± 0.1936 ^h	2.7346 ± 0.08057 ^h	1.7276 ± 0.02531 ^h	2.0221 ± 0.05639 ^h	0.01335 ± 0.006185

48h	0.01852 ±	5.3283 ± 0.320 ^d	1.5008 ±	1.8495 ± 0.1262 ^h	3.1077 ± 0.2032 ^h	1.5861 ±	1.1575 ±	1.0652 ±	0.008817 ±
	0.01301		0.02613 ^h			0.02007 ^h	0.006842 ^h	0.01447 ^h	0.004809
72h	0.07050 ±	4.1780 ± 0.3672 ^d	3.1399 ± 0.1326 ^h	1.6713 ±	2.3228 ±	1.6173 ±	0.9501 ±	0.7895 ±	0.02023 ±
	0.001255		0.04402 ^h	0.03989 ^h	0.07619 ^h	0.02069 ^h	0.02328 ^h	0.005063	
96h	0.004933 ±	3.9037 ± 0.3492 ^d	1.4176 ±	1.7169 ±	1.4448 ±	1.3226 ±	0.9950 ± 0.1554 ^h	0.6904 ±	0.07570 ±
	0.003164		0.009471 ^h	0.03964 ^h	0.05089 ^h	0.01400 ^h		0.01727 ^h	0.03801
120h	0.03073 ±	2.4483 ±	1.2920 ±	1.4216 ±	1.1807 ±	0.6205 ±	0.3060 ±	0.2604 ±	0.07490 ±
	0.01605	0.08323 ^d	0.01766 ^h	0.04496 ^h	0.01518 ^h	0.01951 ^h	0.003654 ^h	0.01252 ^h	0.04498
144h	0.03548 ±	2.0460 ±	1.2194 ±	1.5207 ±	1.2544 ±	0.5642 ±	0.4810 ±	0.1347 ±	0.1084 ±
	0.03329	0.05280 ^d	0.01070 ^h	0.03511	0.004889 ^h	0.02214 ^h	0.003530 ^h	0.001300 ^h	0.06032
168h	0.005583 ±	1.7586 ±	1.5689 ±	1.4226 ±	0.8554 ±	0.3870 ±	0.1987 ±	0.1333 ±	0.01997 ±
	0.002484	0.05640 ^d	0.08585	0.03284	0.03305 ^h	0.01453 ^h	0.002293 ^h	0.002124 ^h	0.009503

Values were represented as Mean ± SEM. a, [#]*p*<0.05, b, ^{##}*p*<0.01, c, ^{###}*p*<0.001, d, ^{####}*p*<0.0001, compared with the blank group, e, ^{*}*p*<0.05, f, ^{**}*p*<0.01, g, ^{***}*p*<0.001, h, ^{****}*p*<0.0001, compared with the control group