**Table S1. Key characteristics of the included studies**

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| --- | --- | --- | --- | --- |
| **Study Id** | **Population** | **Intervention; Number of participants** | **Comparator; Number of participants**  | **Outcomes** |
| **Mean age (years)** | **Mean gravida; Mean parity** | **Mean gestational age (weeks)** |
| Adamczak 2007 [19]; Italy; Conference abstract | NS | NS | 8-14 | Methylprednisolone 8 mg thrice daily for 6 days; 55 | Promethazine 25 mg Q6h for 6 days; 55 | Vomiting episodes |
| Babaei 2014 [20]; Iran | 25 | NS; 1 | 10.5 | Vitamin B6 50 mg/day orally for 7 days; 70 | Dimenhydrinate 50 mg/day orally for 7 days; 70 | Nausea and vomiting scores; AE |
| Basirat 2009 [21]; Iran | 19-35 | NS | 7-17 | Ginger biscuit 2.5 g/day for 4 days; 35 | Placebo for 4 days; 30 | Vomiting episodes; nausea and vomiting scores; AE |
| Belluomini 1994 [22]; USA | 33.5 | 1; 1 | 8.5 | Acupressure at P6 point for 7 days; 30 | Placebo for 7 days; 30 | Nausea and vomiting score |
| Biswas 2011 [23]; India | 22 | 1; 1 | < 16 | Ginger 150 mg three times daily; 34 | Doxylamine 10 mg and pyridoxine 10 mg two or three times daily; 29 | Nausea and vomiting score |
| Bsat 2003 [24]; USA | 26 | 1;1 | 8.5 | Pyridoxine 50 mg intramuscular injection with oral metoclopramide 10 mg Q6h to a group of 54 participants; Another group received promethazine 25 mg orally Q6h; 52 | Prochlorperazine 25 mg rectal suppositories Q12h; 50 | Vomiting episodes; Adverse neonatal outcomes |
| Chittumma 2007 [25]; Thailand | 24 | 1;1 | 11.5 | Oral ginger 650 mg three times daily for 4 days; 61 | 25 mg vitamin B6 three times daily for 4 days; 62 | Nausea and vomiting score; AE |
| Ensiyeh 2009 [26]; Iran | 25 | 1; 1 | < 17 weeks | Ginger orally 1 g/day for 4 days; | Vitamin B6 40 mg/day orally for 4 days; | Vomiting episodes; nausea and vomiting scores; AE |
| Firouzbhakt 2014 [27]; Iran | 25 | 1;1 | 9 | Ginger orally 250 mg Q6h for 4 days to a group of 40; Vitamin B6 40 mg Q6h for 4 days to a group of 40 | Placebo for 4 days; 40 | Nausea score; Vomiting episodes; AE |
| Can Gurkan 2008 [28]; Turkey | NS | 1; 1 | NS | Acupressure at P6 point for 6 days; 26 | Placebo for 6 days; 24 | Vomiting episodes; Nausea scores |
| Hsu 2003 [29]; USA; Conference abstract | 23.6 | NS | 9 | Acupressure at P6 pint; 38 | Placebo; 39 | Nausea scores; Hospital stay; Rescue anti-emetic use |
| Hyde 1989 [30]; USA | NS | NS | NS | Acupressure at P6 point; 8 | Placebo; 8 | Nausea score; anxiety, depression, hostility, psychosocial scores |
| Jafari-Dehkordi 2017 [31]; Iran | 27.5 | 1; 1 | 9.6 | Quince 5 ml three times daily for 7 days; 45 | Vitamin B6 20 mg three times daily for 7 days; 45 | Nausea scores; AE |
| Jamigorn 2007 [32]; Thailand | 28 | NS;1 | 8.1 | Acupressure at P6 point; 33 | Vitamin B6 40 mg daily; 33 | Nausea scores; rescue anti-emetic use; satisfactory rating; AE |
| Haji Seid Javadi 2013 [33]; Iran | 26.5 | 1; 1 | 9.5 | Ginger 250 mg Q6h; | Vitamin B6 40 mg Q12h; | Nausea scores; AE |
| Keating 2002 [34]; USA | 24-37 | NS; 1 | < 11 | Ginger syrup 1 g daily; | Placebo Q6h; | Control of vomiting; degree of nausea and vomiting; AE |
| Knight 2001 [35]; UK | 30.3 | 1;1 | 8 | Acupressure at P6 point; 28 | Placebo; 27 | Nausea scores; AE |
| Koren 2010 [36]; USA | 25 | NS | 5.5 | Doxylamine 10 mg and Vitamin B6 10 mg per day; 140 | Placebo; 140 | Nausea scores; well-being score; rescue anti-emetic use |
| Koren 2015 [37]; USA | 25 | NS | 5.5 | Doxylamine 10 mg and Vitamin B6 10 mg per day; 131 | Placebo; 125 | AE |
| Modares 2012 [38]; Iran | NS | NS | < 16 | Ginger and chamomile at 500 mg per day to two separate groups of 35 each | Placebo; 35 | Nausea scores |
| Mohammadbeigi 2011 [39]; Iran | 27 | 2;1 | NS | Metoclopramide 10 mg and ginger 200 mg three times daily to each groups of 34 each | Placebo; 34 | Nausea and vomiting scores |
| Narenji 2012 [40]; Iran | 25.5 | NS | NS | Ginger syrup; 98  | Vitamin B6; 99 | Rate of nausea and vomiting |
| Norheim 2001 [41]; Norway | 28.4 | NS; 1.5 | NS | Acupressure; NS | Placebo; NS | Nausea scores; Duration of nausea |
| O’Brien 1996 [42]; Canada | 29.5 | 2; 1 | 10.1 | Acupressure P6 point; 54 | Placebo; 53 | Nausea and vomiting scores |
| Oliviera 2014 [43]; USA |  | 2; 1 | 8 | Ondansetron 4 mg Q8h for 5 days; 18 | Pyridoxine 25 mg with 12.5 mg of doxylamine Q8h for 5 days; 18 | Nausea and vomiting scores; AE |
| Ozgoli 2009 [44]; Iran | 24 | NS; 1 | 13 | Ginger 250 mg Q6h for 4 days; 35 | Placebo for 4 days; 35 | Vomiting episodes; Nausea score |
| Pasha 2012 [45]; Iran | 25 | NS | 8 | Mint oil; 30 | Placebo; 30 | Nausea and vomiting scores  |
| Pongrojpaw 2007 [46]; Thailand | 27 | 1; 1 |  | Ginger 500 mg twice daily for 7 days; 85 | Dimenhydrinate 50 mg twice daily for 7 days; 85 | Nausea scores; AE |
| Rad 2012 [47]; Iran | 26 | 1; 1 | 9.5 | KID21 acupressure 20 minutes a day for 4 days; 40 | Placebo; 40 | Nausea and vomiting scores |
| Rosen 2003 [48]; USA | 29.5 | 1; 1 | 9 | Nerve stimulation at P6 point for 21 days; 95 | Placebo for 21 days; 92 | Nausea scores; medication use,weight gain, and presence of urinary ketones |
| Rukh 2016 [49]; Pakistan | 47 | NS | NS | Ginger 500 mg twice daily for 60 days; 35 | Vitamin B6 25 mg twice daily for 60 days; 30 | Nausea and vomiting scores; well-being scores; Heartburn and palpitation |
| Saberi 2013 [50]; Iran | 26 | 1; 1 | 9 | Ginger (250 mg Q8h) to a group of 53; Acupressure at P6 point to another group of 53; | No intervention; 53  | Nausea and vomiting scores; control of symptoms of nausea and vomiting |
| Sahakian 1991 [51]; USA | 29 | 1; 1 | 9.5 | Vitamin B6 25 mgQ8h for 3 days; 31 | Placebo; 28 | Nausea scores; control of vomiting; |
| Sharifzadeh 2017 [52]; Iran | 28.5 | 1; 1 | 10.5 | Ginger 500 mg Q12h for 4 days to one group of 28; Vitamin B6 40 mg Q12h to another group of 26 | Placebo; 23 | Nausea and vomiting scores |
| Smith 2004 [53]; Australia | 29 | 1; 1 | 8.5 | Ginger 350 mg Q8h for 3 weeks; 146 | Vitamin B6 25 mg Q8h for 3 weeks; 145 | Nausea and vomiting scores; adverse pregnancy and neonatal outcomes |
| Sripramote 2003 [54]; Thailand | 27 | 1; 1 | 10.1 | Ginger 500 mg Q8h for 3 days; 68 | Vitamin B6 10 mg Q8h for 3 days; 70 | Vomiting scores; Nausea scores |
| Steele 2001 [55]; USA | 27.5 | 1; 2 | 8.6 | Acupressure at P6 point; 17 | Placebo; 11 | Severity and frequency of nausea and vomiting |
| Tara 2015 [56]; Iran; Conference abstract | 26.4 | NS | 9.4 | Acupressure at P6 point and vitamin B6 to groups of 30 each  | Placebo; 30 | Control of vomiting |
| Vutyavanich 1995 [57]; Thailand | 27 | 1; 1 | 10.9 | Vitamin B6 30 mg/day for 5 days; 169 | Placebo for 5 days; 167 | Nausea scores; vomiting episodes; compliance to therapy |
| Vutyavanich 2001 [58]; Thailand | 28.3 | 1; 1 | 10.3 | Ginger 250 mg Q8h for 4 days; 32 | Placebo for 4 days; 38 | Vomiting episodes; control of vomiting; nausea scores; AE |
| Werntoft 2001 [59]; Sweden | 30 | NS | 5.8 | Acupressure at P6 point; 20 | Placebo; 20 | Nausea scores |
| Willetts 2003 [60]; Australia | 32 | NS | 9 | Ginger 125 mg Q6h for 4 days; 60 | Placebo for 4 days; 60 | Nausea scores; adverse pregnancy outcomes;  |
| Yavari 2014 [61]; Iran | 26 | 1; 1 | 10.5 | Lemon oil inhalation; 50 | Placebo; 50  | Nausea scores |
| Shin 2005 [62]; South Korea | NS | 1; 1 | 8.6 | Acupressure at P6 point; 23 | Placebo; 22 | Vomiting episodes |
| Smith 2002 [63]; Australia | 30 | NS | 8 | Traditional acupuncture to a group of 148; Two other groups received PC6 acupuncture and sham acupuncture  | No acupuncture control; 149 | Nausea scores |
| Ghani 2013 [64]; Saudi Arabia | 25 | NS | 10 | Essential oils (peppermint and lavender) aromatherapy; 50 | Standard of care; 51 | Episodes of nausea and vomiting; nausea and mood scores  |
| Khavandizadeh 2010 [65]; Iran | NS | Primigravida | 10-16 | Acupressure; 50 | Placebo; 50 | Nausea scores |
| Ghahiri 2011 [66]; Iran | 25.3 | NS | 11 | Metoclopramide for 3 weeks; 35 | Ondansetron for 3 weeks; 35 | Nausea and vomiting episodes |
| Puangsricharern 2008 [67]; Thailand | 26.6 | 50% primigravida | 11.1 | Acupressure; 45 | Placebo; 46 | Nausea scores; Satisfaction scores |
| De Veciana 2001 [68]; USA; Conference abstract | NS | NS | 6-12  | Acupressure; NS | Placebo; NS | Weight gain; nausea scores |

NS – not specified; AE – adverse events.

**Figure S1. Funnel plot for nausea scores between ginger and placebo**



CES – Combined effect size.

No asymmetry was observed in the distribution of the pooled estimates and no publication bias was detected by Egger’s regression test (P = 0.9).

**Figure S3. Funnel plot for nausea scores between acupressure and placebo**



CES – Combined effect size.

No asymmetry in the distribution of pooled estimates was observed and no publication bias was detected by Egger’s regression test (P = 0.1).

**Figure S4. Funnel plot for nausea scores between ginger and vitamin B6**



CES – Combined effect size.

No asymmetry was observed in the funnel plot and no publication bias was observed with Egger’s regression analysis (P = 0.2).

**Figure S5. Forest plot for nausea scores for the interventions compared to placebo in the sensitivity analysis**



Vitamin B6, ginger, doxylamine/vitamin B6, chamomile, metoclopramide and acupuncture were observed with significantly reduced nausea scores compared to placebo.

**Figure S6. Trial sequential analysis graph for nausea scores for the comparison between ginger and placebo**



Blue line in the figure indicates the trend of the pooled estimates after adjusting for the type 1 error. Ginger was associated with reduced nausea scores than placebo.

**Figure S7. Trial sequential analysis graph for nausea scores for acupressure compared with placebo.**



No significant differences were observed between acupressure and placebo.