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CORRECTION

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Correction to: Early versus late intramedullary nailing for traumatic femur fracture management: meta-analysis

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Correction

Following the publication of this article [1], the authors reported that they had submitted an incorrect version of Figs. 2, 3 and 4. They apologize for this error and the correct versions of Figs. 2, 3 and 4 with captions have been included in this Correction. There is a typographical error in the following sentence: Two retrospective cohort studies reported results on any and all complications [23, 30]. The correct version of this sentence is: Two retrospective cohort studies reported results on any complication [24, 34].

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Reference
1. El-Menyar, et al. Early versus late intramedullary nailing for traumatic femur fracture management: meta-analysis. J Orthop Surg Res. 2018;13:160. https://doi.org/10.1186/s13018-018-0856-4.
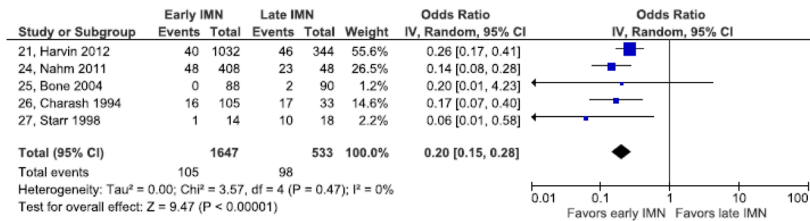
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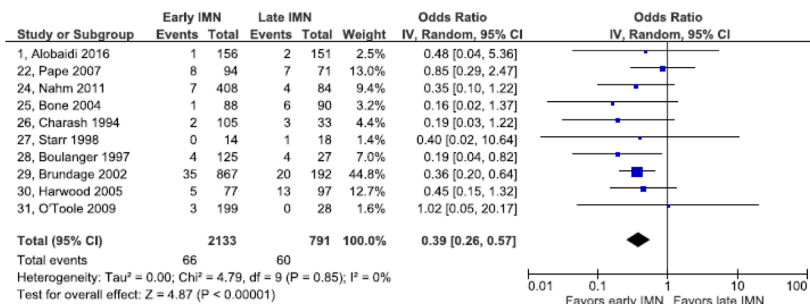[2]Trauma Surgery, Clinical Research, Hamad General Hospital, Doha, Qatar
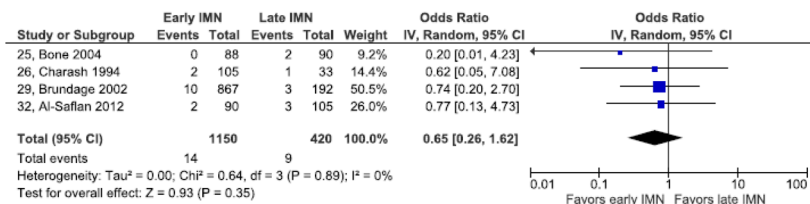Full list of author information is available at the end of the article

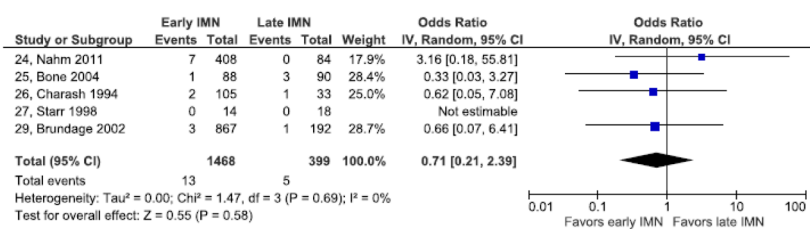El-Menyar *et al. Journal of Orthopaedic Surgery and Research* (2018) 13:182

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a) Pulmonary complications

Study or Subgroup	Early IMN Events	Total	Late IMN Events	Total	Weight	Odds Ratio IV, Random, 95% CI
21, Harvin 2012	40	1032	46	344	55.6%	0.26 [0.17, 0.41]
24, Nahm 2011	48	408	23	48	26.5%	0.14 [0.08, 0.28]
25, Bone 2004	0	88	2	90	1.2%	0.20 [0.01, 4.23]
26, Charash 1994	16	105	17	33	14.6%	0.17 [0.07, 0.40]
27, Starr 1998	1	14	10	18	2.2%	0.06 [0.01, 0.58]
Total (95% CI)		**1647**		**533**	**100.0%**	**0.20 [0.15, 0.28]**
Total events	105		98			

Heterogeneity: Tau² = 0.00; Chi² = 3.57, df = 4 (P = 0.47); I² = 0%
Test for overall effect: Z = 9.47 (P < 0.00001)

b) Acute respiratory distress syndrome

Study or Subgroup	Early IMN Events	Total	Late IMN Events	Total	Weight	Odds Ratio IV, Random, 95% CI
1, Alobaidi 2016	1	156	2	151	2.5%	0.48 [0.04, 5.36]
22, Pape 2007	8	94	7	71	13.0%	0.85 [0.29, 2.47]
24, Nahm 2011	7	408	4	84	9.4%	0.35 [0.10, 1.22]
25, Bone 2004	1	88	6	90	3.2%	0.16 [0.02, 1.37]
26, Charash 1994	2	105	3	33	4.4%	0.19 [0.03, 1.22]
27, Starr 1998	0	14	1	18	1.4%	0.40 [0.02, 10.64]
28, Boulanger 1997	4	125	4	27	7.0%	0.19 [0.04, 0.82]
29, Brundage 2002	35	867	20	192	44.8%	0.36 [0.20, 0.64]
30, Harwood 2005	5	77	13	97	12.7%	0.45 [0.15, 1.32]
31, O'Toole 2009	3	199	0	28	1.6%	1.02 [0.05, 20.17]
Total (95% CI)		**2133**		**791**	**100.0%**	**0.39 [0.26, 0.57]**
Total events	66		60			

Heterogeneity: Tau² = 0.00; Chi² = 4.79, df = 9 (P = 0.85); I² = 0%
Test for overall effect: Z = 4.87 (P < 0.00001)

c) Fat embolism

Study or Subgroup	Early IMN Events	Total	Late IMN Events	Total	Weight	Odds Ratio IV, Random, 95% CI
25, Bone 2004	0	88	2	90	9.2%	0.20 [0.01, 4.23]
26, Charash 1994	2	105	1	33	14.4%	0.62 [0.05, 7.08]
29, Brundage 2002	10	867	3	192	50.5%	0.74 [0.20, 2.70]
32, Al-Saflan 2012	2	90	3	105	26.0%	0.77 [0.13, 4.73]
Total (95% CI)		**1150**		**420**	**100.0%**	**0.65 [0.26, 1.62]**
Total events	14		9			

Heterogeneity: Tau² = 0.00; Chi² = 0.64, df = 3 (P = 0.89); I² = 0%
Test for overall effect: Z = 0.93 (P = 0.35)

d) Pulmonary embolism

Study or Subgroup	Early IMN Events	Total	Late IMN Events	Total	Weight	Odds Ratio IV, Random, 95% CI
24, Nahm 2011	7	408	0	84	17.9%	3.16 [0.18, 55.81]
25, Bone 2004	1	88	3	90	28.4%	0.33 [0.03, 3.27]
26, Charash 1994	2	105	1	33	25.0%	0.62 [0.05, 7.08]
27, Starr 1998	0	14	0	18		Not estimable
29, Brundage 2002	3	867	1	192	28.7%	0.66 [0.07, 6.41]
Total (95% CI)		**1468**		**399**	**100.0%**	**0.71 [0.21, 2.39]**
Total events	13		5			

Heterogeneity: Tau² = 0.00; Chi² = 1.47, df = 3 (P = 0.69); I² = 0%
Test for overall effect: Z = 0.55 (P = 0.58)

e) Pneumonia

Study or Subgroup	Early IMN Events	Total	Late IMN Events	Total	Weight	Odds Ratio IV, Random, 95% CI
22, Pape 2007	15	94	20	71	16.2%	0.48 [0.23, 1.03]
24, Nahm 2011	40	408	19	84	21.4%	0.37 [0.20, 0.68]
25, Bone 2004	1	88	3	90	2.5%	0.33 [0.03, 3.27]
26, Charash 1994	13	105	15	33	12.7%	0.17 [0.07, 0.42]
27, Starr 1998	1	14	10	18	2.6%	0.06 [0.01, 0.58]
29, Brundage 2002	76	867	28	192	27.9%	0.56 [0.35, 0.90]
30, Harwood 2005	12	77	33	97	16.6%	0.36 [0.17, 0.75]
Total (95% CI)		**1653**		**585**	**100.0%**	**0.37 [0.26, 0.54]**
Total events	158		128			

Heterogeneity: Tau² = 0.07; Chi² = 8.68, df = 6 (P = 0.19); I² = 31%
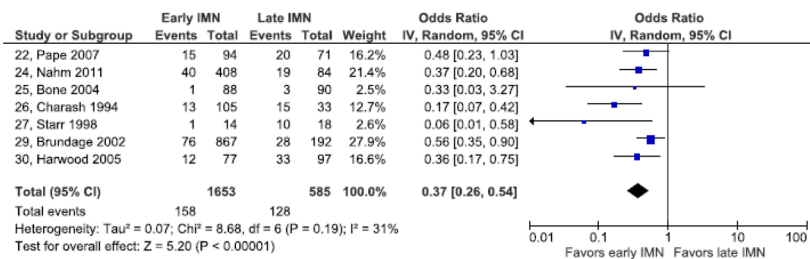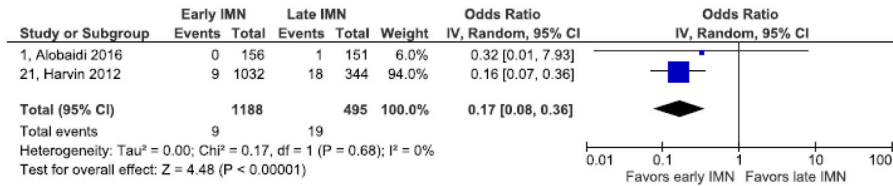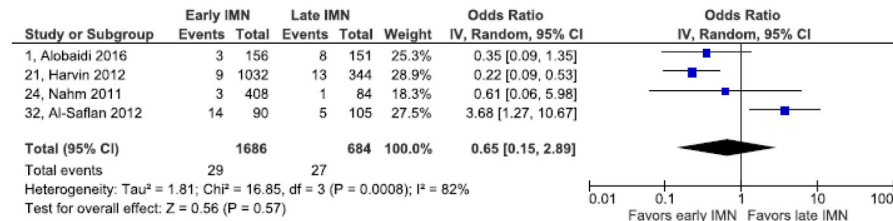Test for overall effect: Z = 5.20 (P < 0.00001)

Fig. 2 Forest plot of pulmonary complications. **a** Pulmonary complications. **b** Acute respiratory distress syndrome. **c** Fat embolism. **d** pulmonary embolism. **e** Pneumonia
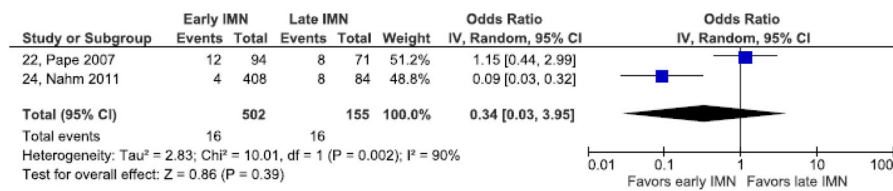
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a) Decubitus ulcers

Study or Subgroup	Early IMN Events	Total	Late IMN Events	Total	Weight	Odds Ratio IV, Random, 95% CI
1, Alobaidi 2016	0	156	1	151	6.0%	0.32 [0.01, 7.93]
21, Harvin 2012	9	1032	18	344	94.0%	0.16 [0.07, 0.36]
Total (95% CI)		1188		495	100.0%	0.17 [0.08, 0.36]
Total events	9		19			

Heterogeneity: Tau² = 0.00; Chi² = 0.17, df = 1 (P = 0.68); I² = 0%
Test for overall effect: Z = 4.48 (P < 0.00001)

b) Wound infection

Study or Subgroup	Early IMN Events	Total	Late IMN Events	Total	Weight	Odds Ratio IV, Random, 95% CI
1, Alobaidi 2016	3	156	8	151	25.3%	0.35 [0.09, 1.35]
21, Harvin 2012	9	1032	13	344	28.9%	0.22 [0.09, 0.53]
24, Nahm 2011	3	408	1	84	18.3%	0.61 [0.06, 5.98]
32, Al-Saflan 2012	14	90	5	105	27.5%	3.68 [1.27, 10.67]
Total (95% CI)		1686		684	100.0%	0.65 [0.15, 2.89]
Total events	29		27			

Heterogeneity: Tau² = 1.81; Chi² = 16.85, df = 3 (P = 0.0008); I² = 82%
Test for overall effect: Z = 0.56 (P = 0.57)

c) Sepsis

Study or Subgroup	Early IMN Events	Total	Late IMN Events	Total	Weight	Odds Ratio IV, Random, 95% CI
22, Pape 2007	12	94	8	71	51.2%	1.15 [0.44, 2.99]
24, Nahm 2011	4	408	8	84	48.8%	0.09 [0.03, 0.32]
Total (95% CI)		502		155	100.0%	0.34 [0.03, 3.95]
Total events	16		16			

Heterogeneity: Tau² = 2.83; Chi² = 10.01, df = 1 (P = 0.002); I² = 90%
Test for overall effect: Z = 0.86 (P = 0.39)

d) Deep vein thrombosis

Study or Subgroup	Early IMN Events	Total	Late IMN Events	Total	Weight	Odds Ratio IV, Random, 95% CI
21, Harvin 2012	8	1032	10	344	38.1%	0.26 [0.10, 0.67]
24, Nahm 2011	31	408	12	84	61.9%	0.49 [0.24, 1.01]
Total (95% CI)		1440		428	100.0%	0.39 [0.21, 0.71]
Total events	39		22			

Heterogeneity: Tau² = 0.02; Chi² = 1.12, df = 1 (P = 0.29); I² = 11%
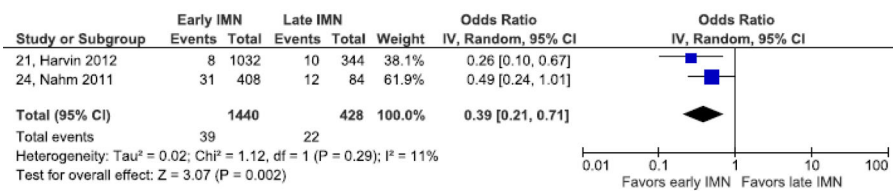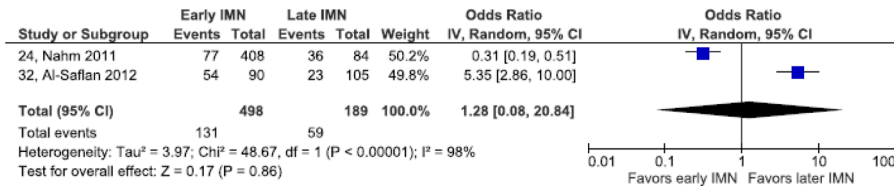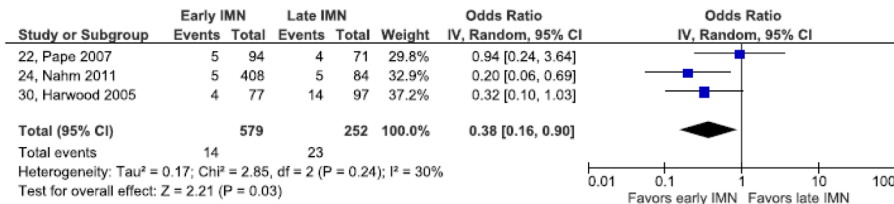Test for overall effect: Z = 3.07 (P = 0.002)

Fig. 3 Forest plots of cutaneous, infectious and venous complications: **a** decubitus ulcers. **b** wound infection. **c** sepsis. **d** deep vein thrombosis

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a) Any complication

Study or Subgroup	Early IMN Events	Total	Late IMN Events	Total	Weight	Odds Ratio IV, Random, 95% CI
24, Nahm 2011	77	408	36	84	50.2%	0.31 [0.19, 0.51]
32, Al-Saflan 2012	54	90	23	105	49.8%	5.35 [2.86, 10.00]
Total (95% CI)		498		189	100.0%	1.28 [0.08, 20.84]
Total events	131		59			

Heterogeneity: Tau² = 3.97; Chi² = 48.67, df = 1 (P < 0.00001); I² = 98%
Test for overall effect: Z = 0.17 (P = 0.86)

Odds Ratio IV, Random, 95% CI — Favors early IMN Favors later IMN

b) Multiorgan failure

Study or Subgroup	Early IMN Events	Total	Late IMN Events	Total	Weight	Odds Ratio IV, Random, 95% CI
22, Pape 2007	5	94	4	71	29.8%	0.94 [0.24, 3.64]
24, Nahm 2011	5	408	5	84	32.9%	0.20 [0.06, 0.69]
30, Harwood 2005	4	77	14	97	37.2%	0.32 [0.10, 1.03]
Total (95% CI)		579		252	100.0%	0.38 [0.16, 0.90]
Total events	14		23			

Heterogeneity: Tau² = 0.17; Chi² = 2.85, df = 2 (P = 0.24); I² = 30%
Test for overall effect: Z = 2.21 (P = 0.03)

Odds Ratio IV, Random, 95% CI — Favors early IMN Favors late IMN

c) Mortality

Study or Subgroup	Early IMN Events	Total	Late IMN Events	Total	Weight	Odds Ratio IV, Random, 95% CI
1, Alobaidi 2016	1	157	0	152	2.7%	2.92 [0.12, 72.32]
21, Harvin 2012	4	1032	6	344	10.5%	0.22 [0.06, 0.78]
23, Morshed 2009	75	2299	33	770	19.9%	0.75 [0.50, 1.14]
24, Nahm 2011	4	408	4	84	9.4%	0.20 [0.05, 0.81]
26, Charash 1994	4	105	3	33	8.4%	0.40 [0.08, 1.87]
27, Starr 1998	0	14	2	18	2.9%	0.23 [0.01, 5.14]
29, Brundage 2002	15	867	5	192	12.9%	0.66 [0.24, 1.83]
30, Harwood 2005	1	77	7	97	5.4%	0.17 [0.02, 1.41]
31, O'Toole 2009	4	199	5	28	9.6%	0.09 [0.02, 0.38]
33, Fakhry 1994	21	1177	8	442	15.2%	0.99 [0.43, 2.24]
34, Reynolds 1995	2	35	0	70	3.0%	10.52 [0.49, 225.34]
Total (95% CI)		6370		2230	100.0%	0.46 [0.26, 0.82]
Total events	131		73			

Heterogeneity: Tau² = 0.38; Chi² = 20.54, df = 10 (P = 0.02); I² = 51%
Test for overall effect: Z = 2.66 (P = 0.008)

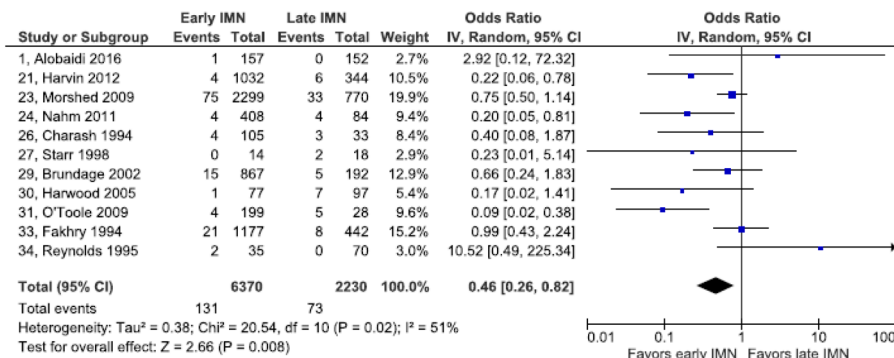Odds Ratio IV, Random, 95% CI — Favors early IMN Favors late IMN

Fig. 4 Forest plots of other complications: **a**. Any complication. **b** multiorgan failure **c.** mortality