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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a) Pulmonary complications

- Acute respiratory distress syndrome
- Fat embolism
- Pulmonary embolism
- Pneumonia
a) Decubitus ulcers

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| Study or Subgroup | Early IMN  | Late IMN  | Odds Ratio IV, Random, 95% CI |
|-------------------|-----------|-----------|-----------------------------|
|                   | Events    | Total     | Weight                      |
| 1, Aboadhi 2016   | 156       | 151       | 0.32 [0.01, 7.93]           |
| 21, Harvin 2012   | 1032      | 344       | 0.16 [0.07, 0.36]           |
| Total (95% CI)    | 1188      | 495       | 0.17 [0.08, 0.36]           |
| Total events      | 9         | 19        |                             |
| Heterogeneity: Tau² = 0.00, Chi² = 1.17, df = 1 (P = 0.68); I² = 0% |
| Test for overall effect: Z = 4.48 (P < 0.00001) |
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b) Wound infection

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| Study or Subgroup | Early IMN  | Late IMN  | Odds Ratio IV, Random, 95% CI |
|-------------------|-----------|-----------|-----------------------------|
|                   | Events    | Total     | Weight                      |
| 1, Aboadhi 2016   | 156       | 151       | 0.35 [0.09, 1.35]           |
| 21, Harvin 2012   | 1032      | 344       | 0.22 [0.09, 0.53]           |
| 24, Nahm 2011     | 408       | 84        | 0.61 [0.06, 5.99]           |
| 32, Al-Saad 2012  | 90        | 5         | 3.68 [1, 27, 10.67]         |
| Total (95% CI)    | 1686      | 684       | 0.65 [0.15, 2.89]           |
| Total events      | 29        | 27        |                             |
| Heterogeneity: Tau² = 1.81, Chi² = 16.45, df = 3 (P = 0.0008); I² = 82% |
| Test for overall effect: Z = 0.56 (P = 0.57) |
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c) Sepsis

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| Study or Subgroup | Early IMN  | Late IMN  | Odds Ratio IV, Random, 95% CI |
|-------------------|-----------|-----------|-----------------------------|
|                   | Events    | Total     | Weight                      |
| 22, Pepe 2007     | 94        | 71        | 1.15 [0.44, 2.99]           |
| 24, Nahm 2011     | 408       | 84        | 0.09 [0.03, 0.32]           |
| Total (95% CI)    | 502       | 155       | 0.34 [0.03, 3.95]           |
| Total events      | 16        | 16        |                             |
| Heterogeneity: Tau² = 2.83, Chi² = 10.01, df = 1 (P = 0.012); I² = 90% |
| Test for overall effect: Z = 0.86 (P = 0.39) |
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d) Deep vein thrombosis

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| Study or Subgroup | Early IMN  | Late IMN  | Odds Ratio IV, Random, 95% CI |
|-------------------|-----------|-----------|-----------------------------|
|                   | Events    | Total     | Weight                      |
| 21, Harvin 2012   | 1032      | 344       | 0.26 [0.10, 0.67]           |
| 24, Nahm 2011     | 408       | 84        | 0.49 [0.24, 0.91]           |
| Total (95% CI)    | 1440      | 428       | 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) |
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Fig. 3 Forest plots of cutaneous, infectious and venous complications: a) decubitus ulcers, b) wound infection, c) sepsis, d) deep vein thrombosis
**a) Any complication**

| Study or Subgroup | Early IMN | Late IMN | Odds Ratio IV, Random, 95% CI | Odds Ratio IV, Random, 95% CI |
|-------------------|-----------|----------|-------------------------------|-------------------------------|
|                   | Events    | Total    | Total                        | Total                        |
| 24, Nahm 2011     | 77        | 408      | 36                            | 84                            | 50.2% | 0.31 [0.19, 0.51] |
| 32, Al-Gaffan 2012| 54        | 90       | 23                            | 105                           | 49.8% | 5.35 [2.38, 10.00] |
| Total (95% CI)    | 131       | 59       | 189                           | 2.18 [0.80, 5.64]             |

Heterogeneity: Tau² = 3.97; Chi² = 48.67, df = 1 (P = 0.00001); I² = 98%
Test for overall effect: Z = 0.17 (P = 0.85)

**b) Multiorgan failure**

| Study or Subgroup | Early IMN | Late IMN | Odds Ratio IV, Random, 95% CI | Odds Ratio IV, Random, 95% CI |
|-------------------|-----------|----------|-------------------------------|-------------------------------|
|                   | Events    | Total    | Total                        | Total                        |
| 22, Papo 2007     | 5         | 94       | 4                             | 71                            | 29.6% | 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)    | 14        | 23       | 252                           | 0.38 [0.16, 0.96]             |

Heterogeneity: Tau² = 0.17; Chi² = 2.65, df = 2 (P = 0.24); I² = 30%
Test for overall effect: Z = 2.21 (P = 0.03)

**c) Mortality**

| Study or Subgroup | Early IMN | Late IMN | Odds Ratio IV, Random, 95% CI | Odds Ratio IV, Random, 95% CI |
|-------------------|-----------|----------|-------------------------------|-------------------------------|
|                   | Events    | Total    | Total                        | Total                        |
| 1, Alabdali 2016  | 1         | 157      | 0                             | 152                           | 2.7%  | 2.92 [0.12, 72.23] |
| 21, Harbin 2012   | 4         | 1032     | 6                             | 344                           | 10.5% | 0.22 [0.06, 0.78] |
| 23, Musheed 2009  | 75        | 2299     | 33                            | 770                           | 19.9% | 0.79 [0.55, 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 1988    | 0         | 14       | 2                             | 16                            | 2.9%  | 0.23 [0.01, 0.51] |
| 29, Brandage 2002 | 15        | 867      | 5                             | 192                           | 12.9% | 0.86 [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%  | 0.29 [0.02, 0.38] |
| 33, Fakry 1994    | 21        | 1177     | 8                             | 442                           | 15.2% | 0.59 [0.43, 0.24] |
| 34, Reynolds 1995 | 2         | 35       | 0                             | 70                            | 3.0%  | 10.52 [0.49, 225.34] |
| Total (95% CI)    | 131       | 73       | 2230                          | 0.46 [0.26, 0.82]             |

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

Fig. 4 Forest plots of other complications: a) Any complication, b) Multiorgan failure, c) Mortality