

Title; Comparative Efficacy of Proximal Femoral Nail vs. Dynamic Condylar Screw in Treating Unstable Intertrochanteric Fractures: A Meta-Analysis

Question?

Is Proximal Femoral Nail superior to Dynamic Condylar Screw

Export references to a citation manager (End note)

The PICO framework

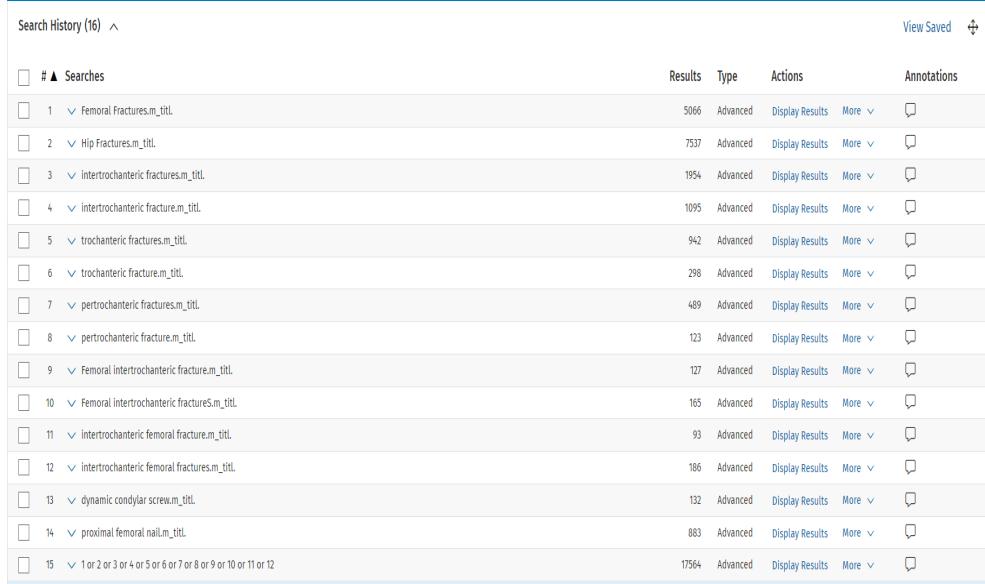
- Population (P) – Patients was diagnose as unstable intertrochanteric fracture
- Intervention (I) – Fixation with a Proximal Femoral Nail (PFN) as an intervention group
- Comparison (C) – Fixation with Dynamic Condylar Screw (DCS) as a comparison group
- Outcomes (O) – operation time, reduction type, blood transfusion, hospital stay duration, fracture consolidation times, implant related complications, re-operation rates and infection rates.

Search date: 01/04/2024

Search strategy:

(Proximal Femoral Nail) or (Dynamic condylar Screw) and ((trochantric) or (intertrochantric) or (intertrochantric))

Data base	Search term	Result
PubMed	((("Femoral Fractures"[Mesh]) OR ("Hip Fractures"[Mesh])) OR (((((((((intertrochanteric fractures) OR (intertrochanteric fracture)) OR (trochanteric fractures)) OR (trochanteric fracture)) OR (peritrochanteric fractures)) OR (peritrochanteric fracture)) OR (Femoral intertrochanteric fracture)) OR (Femoral intertrochanteric fractures)) OR (intertrochanteric femoral fracture)) OR (intertrochanteric femoral fractures)) OR (IFFs)) OR (IFF))) AND (((dynamic condylar screw) OR (DCS)) OR ("Bone Screws"[Mesh]))) AND (proximal femoral nail) OR (PFN)	1015
Scopus	(((Femoral Fractures) OR (Hip Fractures)) OR (((((((intertrochanteric fractures) OR (intertrochanteric fracture)) OR (trochanteric fractures)) OR (trochanteric fracture)) OR (peritrochanteric fractures)) OR (peritrochanteric fracture)) OR (Femoral intertrochanteric fracture)) OR (Femoral intertrochanteric fractures)) OR (intertrochanteric femoral fracture)) OR (intertrochanteric femoral fractures)) OR (IFFs)) OR (IFF))) AND (((dynamic condylar screw) OR	905

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OVID	 Ovid® My Account Support & Training University of Sharjah Libguides Help Feedback Log Off Search Journals My Workspace  <p>Search History (16) ^</p> <table border="1"> <thead> <tr> <th>#</th> <th>Search Term</th> <th>Results</th> <th>Type</th> <th>Actions</th> <th>Annotations</th> </tr> </thead> <tbody> <tr><td>1</td><td>Femoral Fractures.m_titL</td><td>5066</td><td>Advanced</td><td>Display Results</td><td></td></tr> <tr><td>2</td><td>Hip Fractures.m_titL</td><td>7537</td><td>Advanced</td><td>Display Results</td><td></td></tr> <tr><td>3</td><td>intertrochanteric fractures.m_titL</td><td>1954</td><td>Advanced</td><td>Display Results</td><td></td></tr> <tr><td>4</td><td>trochanteric fractures.m_titL</td><td>1095</td><td>Advanced</td><td>Display Results</td><td></td></tr> <tr><td>5</td><td>peretrochanteric fractures.m_titL</td><td>942</td><td>Advanced</td><td>Display Results</td><td></td></tr> <tr><td>6</td><td>trochanteric fracture.m_titL</td><td>298</td><td>Advanced</td><td>Display Results</td><td></td></tr> <tr><td>7</td><td>peretrochanteric fracture.m_titL</td><td>489</td><td>Advanced</td><td>Display Results</td><td></td></tr> <tr><td>8</td><td>peretrochanteric fracture.m_titL</td><td>123</td><td>Advanced</td><td>Display Results</td><td></td></tr> <tr><td>9</td><td>Femoral intertrochanteric fracture.m_titL</td><td>127</td><td>Advanced</td><td>Display Results</td><td></td></tr> <tr><td>10</td><td>Femoral intertrochanteric fractures.m_titL</td><td>165</td><td>Advanced</td><td>Display Results</td><td></td></tr> <tr><td>11</td><td>intertrochanteric femoral fracture.m_titL</td><td>93</td><td>Advanced</td><td>Display Results</td><td></td></tr> <tr><td>12</td><td>intertrochanteric femoral fractures.m_titL</td><td>186</td><td>Advanced</td><td>Display Results</td><td></td></tr> <tr><td>13</td><td>dynamic condylar screw.m_titL</td><td>132</td><td>Advanced</td><td>Display Results</td><td></td></tr> <tr><td>14</td><td>proximal femoral nail.m_titL</td><td>883</td><td>Advanced</td><td>Display Results</td><td></td></tr> <tr><td>15</td><td>1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12</td><td>17564</td><td>Advanced</td><td>Display Results</td><td></td></tr> <tr><td>16</td><td>13 and 14 and 15</td><td>5</td><td>Advanced</td><td>Display Results</td><td></td></tr> </tbody> </table>	#	Search Term	Results	Type	Actions	Annotations	1	Femoral Fractures.m_titL	5066	Advanced	Display Results		2	Hip Fractures.m_titL	7537	Advanced	Display Results		3	intertrochanteric fractures.m_titL	1954	Advanced	Display Results		4	trochanteric fractures.m_titL	1095	Advanced	Display Results		5	peretrochanteric fractures.m_titL	942	Advanced	Display Results		6	trochanteric fracture.m_titL	298	Advanced	Display Results		7	peretrochanteric fracture.m_titL	489	Advanced	Display Results		8	peretrochanteric fracture.m_titL	123	Advanced	Display Results		9	Femoral intertrochanteric fracture.m_titL	127	Advanced	Display Results		10	Femoral intertrochanteric fractures.m_titL	165	Advanced	Display Results		11	intertrochanteric femoral fracture.m_titL	93	Advanced	Display Results		12	intertrochanteric femoral fractures.m_titL	186	Advanced	Display Results		13	dynamic condylar screw.m_titL	132	Advanced	Display Results		14	proximal femoral nail.m_titL	883	Advanced	Display Results		15	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12	17564	Advanced	Display Results		16	13 and 14 and 15	5	Advanced	Display Results		5
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Total: 2304

After duplicate removal: 1723

After screening title and abstract = 7

After screening eligibility for inclusion: 6

Final studies included:

- 1- Jamil MF, Mohd J, Abbas M, Siddiqui YS, Khan MJ. A comparative study of Proximal Femoral Nail (PFN) versus Dynamic Condylar Screw (DCS) in management of unstable trochanteric fractures. *Int J Burns Trauma* [Internet]. 2022;12(3):83–92. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/35891974> %A <http://www.ncbi.nlm.nih.gov/articlerender.fcgi?artid=PMC9301162>
- 2- Ghilzai AK, Idrees Z, Khan MA, Kazim M, Najjad R. Comparison of proximal femur nail and dynamic condylar screw in treating proximal femoral fractures. 2016;32(2):100–3.
- 3- Sadowski C, Lübbeke A, Saudan M, Riand N, Stern R, Hoffmeyer P. Treatment of reverse oblique and transverse intertrochanteric fractures with use of an intramedullary nail or a 95° screw-plate: A prospective, randomized study. *J Bone Jt Surg.* 2002;84(3):372–81.
- 4- Şensöz E, Ergun S, Kayaalp ME, Eceviz E. The Comparison of Dynamic Condylar Screw Plate to Proximal Femoral Nail in Reverse Oblique and Transverse Intertrochanteric Fractures: A Retrospective Study on 61 Patients. *Cureus.* 2023;15(3):8–13.
- 5- Şahin EK, İmerci A, Kınık H, Karapınar L, Canbek U, Savran A. Comparison of proximal femoral nail antirotation (PFNA) with AO dynamic condylar screws (DCS) for the treatment for unstable peritrochanteric femoral fractures. *Eur J Orthop Surg Traumatol.* 2014;24(3):347–52.
- 6- Elis J, Chechik O, Maman E, Steinberg EL. Expandable proximal femoral nails versus 95° dynamic condylar screw-plates for the treatment of reverse oblique intertrochanteric fractures. *Injury* [Internet]. 2012;43(8):1313–7. Available from: <http://dx.doi.org/10.1016/j.injury.2012.05.004>