
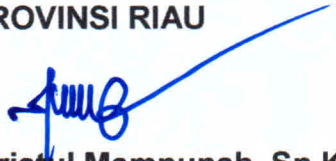


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|  | <p><b>PANDUAN PRAKTIK KLINIS<br/>(PPK)<br/>KSM BEDAH (ORTHOPEDI<br/>DAN TRAUMATOLOGI)<br/>RSUD ARIFIN ACHMAD<br/>PROVINSI RIAU</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <p>Pekanbaru, April 2024<br/>Ditetapkan,</p> <p><b>DIREKTUR RSUD ARIFIN ACHMAD<br/>PROVINSI RIAU</b></p>  <p><b><u>drg. Wan Fajriatul Mamnunah, Sp.KG</u></b><br/><b>NIP. 19780618 200903 2 001</b></p> |
| <p align="center"><b>FRAKTUR FEMUR</b></p>                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                            |
| <p><b>1. Pengertian<br/>(Definisi)</b></p>                                       | <p>Fraktur adalah diskontinuitas susunan tulang yang terjadi karena trauma atau kondisi medis. Hal ini biasanya terjadi karena suatu tindakan rudapaksa. Kecelakaan lalu lintas, seperti kecelakaan motor dan mobil, dan kecelakaan pejalan kaki sewaktu menyebrang, adalah penyebab utama fraktur</p>                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                            |
| <p><b>2. Anamnesis</b></p>                                                       | <ul style="list-style-type: none"> <li>- Riwayat trauma</li> <li>- Nyeri pada paha</li> <li>- Tidak dapat berjalan</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                            |
| <p><b>3. Pemeriksaan Fisik</b></p>                                               | <ul style="list-style-type: none"> <li>- <i>Primary Survey</i> : ABCDE</li> <li>- <i>Secondary Survey</i> : <i>Head to Toe examination</i></li> <li>- Adanya deformitas, hematoma, edema dan luka</li> <li>- Evaluasi kerusakan jaringan lunak, tulang, status <i>Neurovascular</i> dan <i>compartment syndrome</i></li> <li>- Dokumentasi : dimensi, lokasi (foto klinis)</li> <li>- Evaluasi kemungkinan cedera penyerta (<i>associated injury</i>) : <i>Pelvis and knee injury</i></li> </ul>                                                                                                                   |                                                                                                                                                                                                                                                                                            |
| <p><b>4. Kriteria Diagnosis</b></p>                                              | <p>Diagnosis dicurigai pada pasien dengan:</p> <ul style="list-style-type: none"> <li>• Nyeri, pembengkakan pada ekstremitas pasca trauma pada anamnesis</li> <li>• Deformitas pada pemeriksaan fisik dengan atau tanpa adanya gangguan motorik dan sensorik saraf tepi</li> <li>• Dapat Disertai laserasi (fraktur terbuka) atau tanpa leserasi (fraktur tertutup)</li> <li>• Keadaan jaringan lunak dan periosteum</li> <li>• Keadaan neurovaskular distal dari <i>fracture site</i></li> </ul> <p>Diagnosis dapat dievaluasi lebih lanjut dengan radiografi pada ekstremitas tungkai yang dicurigai fraktur</p> |                                                                                                                                                                                                                                                                                            |
| <p><b>5. Diagnosis Kerja</b></p>                                                 | <p>Fraktur Femur (terbuka atau tertutup)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                            |
| <p><b>6. Diagnosis<br/>Banding</b></p>                                           | <ul style="list-style-type: none"> <li>- Vulnus laceratum</li> <li>- Fraktur tertutup</li> <li>- <i>Degloving Injury</i></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                            |

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|                                           | <ul style="list-style-type: none"> <li>- Sindroma Kompartemen</li> <li>- Crush Injury</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 7. Pemeriksaan Penunjang                  | Rontgen X-Ray Femur AP-Lateral<br>CT Scan Hip atau Genu ( Fraktur Peri-Intraartikular)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 8. Tata Laksana                           | <ul style="list-style-type: none"> <li>➤ Prosedur ATLS</li> <li>➤ Immobilisasi sementara dengan <i>skin traction</i> dan atau <i>splint system</i> (DeltaXpress, Slab)</li> <li>➤ Analgetik : <ul style="list-style-type: none"> <li>○ Paracetamol (CetaPain drips) 1000mg / IV / 8 jam atau NSAID selama 3 hari.</li> <li>○ Kombinasi opioid sistemik (sesuai indikasi).</li> </ul> </li> <li>➤ Stabilisasi fraktur</li> <li>➤ <i>Casting</i> untuk <i>nondisplaced fracture</i></li> <li>➤ <i>Internal Fixation Plate and Screw, Intramedullary Nailing, Antegrade Nailing, Retrograde Nailing, Proximal Femur Nailing Anterograde (PFNA) Skin atau Skeletal Traction</i> hingga <i>Hip Arthroplasty</i> sesuai indikasi. <ul style="list-style-type: none"> <li>○ Pre Operatif <ul style="list-style-type: none"> <li>▪ IVFD Assering</li> <li>▪ Pasang Catheter</li> <li>▪ Inj Ceftriaxon 1gr/12jam (untuk <i>opened fracture</i>)</li> <li>▪ Inj Ketorolac 1 amp/8jam</li> <li>▪ Inj ranitidine 1 amp/8jam</li> <li>▪ Inj ATS/Immunoglobulin (untuk <i>opened fracture</i>)</li> </ul> </li> <li>○ Antibiotik Profilaksis 1 jam pra operasi.</li> <li>○ Analgetik post-operasi <ul style="list-style-type: none"> <li>▪ Paracetamol (Sanmol atau Farmadol drips) 1000mg / IV / 8 jam atau NSAID selama 3 hari.</li> <li>▪ Ketorolac 30mg/8jam selama 3 hari</li> <li>▪ Kombinasi opioid sistemik (sesuai indikasi).</li> </ul> </li> </ul> </li> <li>➤ Konservatif untuk fraktur stabil dan non displace</li> </ul> |
| 9. Edukasi<br>(Hospital Health Promotion) | <ol style="list-style-type: none"> <li>1) Imobilisasi area fraktur</li> <li>2) Mencari pertolongan pertama yang adekuat</li> <li>3) Membatasi aktifitas fisik</li> <li>4) Melakukan kontrol rutin pasca tatalaksana definitif</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 10. Prognosis                             | Prognosis fraktur secara umum baik, dengan tatalaksana yang tepat pasien dengan fraktur bisa pulih secara penuh tanpa disabilitas yang signifikan.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |



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| <p><b>11.   Kepustakaan</b></p> | <ol style="list-style-type: none"> <li>1. Saunders. Dorland's pocket medical dictionary. Edisi ke-28; 2009.</li> <li>2. Denisiuk M, Afsari A. Femoral shaft fractures. StatPearls Publishing. 2023.</li> <li>3. Saita Y, Ishijima M, Kaneko K. Atypical femoral fractures and bisphosphonate use: current evidence and clinical implications. Ther Adv Chronic Dis. 2015 Jul;6(4):185-93.</li> <li>4. Weiss RJ, Montgomery SM, Al Dabbagh Z, Jansson KA. National data of 6409 Swedish inpatients with femoral shaft fractures: stable incidence between 1998 and 2004. Injury. 2009 Mar;40(3):304-8.</li> <li>5. Enninghorst N, McDougall D, Evans JA, Sisak K, Balogh ZJ. Population-based epidemiology of femur shaft fractures. J Trauma Acute Care Surg. 2013 Jun;74(6):1516-20.</li> <li>6. Subcommittee on Advanced Trauma Life Support (ATLS) of the American College of Surgeons (ACS), Committee on Trauma, 1987-1988. Advanced Trauma Life Support Course for Physicians. Chicago, Ill. :Committee on Trauma, American College of Surgeons, 1989.</li> <li>7. Clyde Medical Emergency, Fracture Management, URL : <a href="https://www.cem.scot.nhs.uk/adult/frextgui.pdf">https://www.cem.scot.nhs.uk/adult/frextgui.pdf</a></li> <li>8. Brundage SI, McGhan R, Jurkovich GJ, Mack CD, Maier RV. Timing of femur fracture fixation: effect on outcome in patients with thoracic and head injuries. J Trauma. 2002 Feb;52(2):299-307.</li> <li>9. Jaicks RR, Cohn SM, Moller BA. Early fracture fixation may be deleterious after head injury. J Trauma. 1997 Jan;42(1):1-5; discussion 5-6.</li> <li>10. Hussain N, Hussain FN, Sermer C, Kamdar H, Schemitsch EH, Sternheim A, Kuzyk P. Antegrade versus retrograde nailing techniques and trochanteric versus piriformis intramedullary nailing entry points for femoral shaft fractures: a systematic review and meta-analysis. Can J Surg. 2017 Feb;60(1):19-29.</li> <li>11. Sheth U, Gohal C, Chahal J, Nauth A, Dwyer T. Comparing Entry Points for Antegrade Nailing of Femoral Shaft Fractures. Orthopedics. 2016 Jan-Feb;39(1):e43-50.</li> <li>12. Ricci WM, Bellabarba C, Evanoff B, Herscovici D, DiPasquale T, Sanders R. Retrograde versus antegrade nailing of femoral shaft fractures. J Orthop Trauma. 2001 Mar-Apr;15(3):161-9.</li> <li>13. Kim PH, Leopold SS. In brief: Gustilo-Anderson classification. [corrected]. Clin Orthop Relat Res. 2012 Nov;470(11):3270-4. doi: 10.1007/s11999-012-2376-6. Epub 2012 May 9. Erratum in: Clin Orthop Relat Res. 2012 Dec;470(12):3624. Erratum in: Clin Orthop</li> </ol> |
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|  | Relat Res. 2019 Oct;477(10):2388. PMID: 22569719; PMCID: PMC3462875. |
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