

Universitatea de Medicină și Farmacie "Carol Davila" București

Departamentul Clinic 14 – Ortopedie și A.T.I.

Disciplina ORTOPEDIE-Spital Clinic Colentina

TEMATICA SI BIBLIOGRAFIA CONCURSULUI DE ADMITERE DOCTORAT

IULIE 2023

1. Sutura meniscală

Subiecte de cercetare:

- Tehnici de sutură all-inside versus inside-out - diferențe semnificative între cele 2 tehnici în ceea ce privește rezultatele postoperatorii după repararea meniscului artroscopic
- Tehnici de reparare a leziunilor de menisc degenerative
- Diferite tehnici pentru managementul leziunilor rampei meniscale folosind portaluri standard anterioare
- Tehnici comune de reparare a rădăcinii meniscului lateral/medial

Bibliografie

1. Bansal S, Floyd ER, A Kowalski M, Aikman E, Elrod P, Burkey K, Chahla J, LaPrade RF, Maher SA, Robinson JL, Patel JM. Meniscal repair: The current state and recent advances in augmentation. *J Orthop Res.* 2021 Jul;39(7):1368-1382
2. Ozeki N, Seil R, Krych AJ, Koga H. Surgical treatment of complex meniscus tear and disease: state of the art. *J ISAKOS.* 2021 Jan;6(1):35-45
3. Rodriguez AN, Reist H, Liechti DJ, Geeslin AG, LaPrade RF. Shuttleing Technique for Directed Fibrin Clot Placement During Augmented Inside-Out Repair of Horizontal Meniscus Tears. *Arthrosc Tech.* 2022 Nov 17;11(12):e2205-e2211
4. Makiev KG, Vasios IS, Georgoulas P, Tilkeridis K, Drosos G, Ververidis A. Clinical significance and management of meniscal extrusion in different knee pathologies: a comprehensive review of the literature and treatment algorithm. *Knee Surg Relat Res.* 2022 Jul 18;34(1):35. doi: 10.1186/s43019-022-00163-1.
5. Elmallah R, Jones LC, Malloch L, et al. A meta-analysis of arthroscopic meniscal repair: inside-out versus outside-in versus all-inside techniques. *J Knee Surg* 2019;32:750–7.
6. Kang DG, Park YJ, Yu JH, et al. A systematic review and meta-analysis of arthroscopic meniscus repair in young patients: comparison of all-inside and inside-out suture techniques. *Knee Surg Relat Res* 2019;31:1–1.
7. Abrams GD, Frank RM, Gupta AK, et al. Trends in meniscus repair and meniscectomy in the United States, 2005-2011. *Am J Sports Med* 2013;41:2333–9.
8. D'Ambrosi R, Meena A, Raj A, Ursino N, Mangiavini L, Herbort M, Fink C. In elite athletes with meniscal injuries, always repair the lateral, think about the medial! A systematic review. *Knee Surg Sports Traumatol Arthrosc.* 2022 Nov 2. doi10.1007/s00167-022-07208-8.

9. Qalib YO, Tang Y, Wang D et al (2021) Ramp lesion of the medial meniscus. *EFORT Open Rev* 6:372–379. <https://doi.org/10.1302/2058-5241.6.200126>
10. Mostafa Zaky Abdelrazek BH, Waly MR, Abdel Aziz MA, Abdel Aziz A (2020) Different techniques for the management of meniscal ramp lesions using standard anterior portals. *Arthrosc Tech* 9:e39–e44. <https://doi.org/10.1016/j.eats.2019.08.020>
11. C.D. Bernard, N.I. Kennedy, A.J. Tagliero, eMedial meniscus posterior root tear treatment: A matched cohort comparison of nonoperative management, partial meniscectomy, and repair *Am J Sports Med*, 48 (2020), pp. 128-132
12. Eric J. Strauss, Laith M. Jazrawi *The Management of Meniscal Pathology: From Meniscectomy to Repair and Transplantation*, Springer, septembrie 2020
13. Tom Minas *Cartilage Repair and Joint Preservation of the Knee*, 2nd Edition Date of Publication: 11/2021

2 Reconstrucția ligamentară - ligamentul încrucișat anterior

Subiecte de cercetare:

- Alogrefe versus autogrefe in reconstructia primara/de revizie ligamentara
- Tehnici de reparare ligamentară/augmentare
- Rezultatele clinice și complicațiile potențiale asociate cu reconstrucția LIA la pacienții imatur schelet (Tanner 3/4) sunt slab definite
- Reinsertia LIA- variante tehnice .

Bibliografie

1. Brian M. Devitt • Mustafa Karahan João Espregueira-Mendes Editors *The Future of Orthopaedic Sports Medicine What Should We Be Worried About?* Springer 2020
2. Zhao, B. A., Yao, Y. Y., Ji, Q. X., Li, Z. Y., Cheng, B., & Pan, J. F. (2022). No difference in postoperative efficacy and safety between autograft and allograft in anterior cruciate ligament reconstruction: a retrospective cohort study in 112 patients. *Annals of translational medicine*, 10(6), 359. <https://doi.org/10.21037/atm-22-1008>
3. Pennock, A., Murphy, M. M., & Wu, M. (2016). Anterior cruciate ligament reconstruction in skeletally immature patients. *Current reviews in musculoskeletal medicine*, 9(4), 445–453. <https://doi.org/10.1007/s12178-016-9367-2>
4. Pagliuzzi G, Cuzzolin M, Pacchiarini L, Delcogliano M, Filardo G, Candrian C. Physeal-sparing ACL reconstruction provides better knee laxity restoration but similar clinical outcomes to partial transphyseal and complete transphyseal approaches in the pediatric population: a systematic review and meta-analysis. *Knee Surg Sports Traumatol Arthrosc.* 2023 Jan;31(1):206-218.
5. Rezaei Dogahe R, Vosughi F, Mortazavi SJ. Anterior Cruciate Ligament Reconstruction in Skeletally Immature Patients. *J Orthop Spine Trauma.* 2021;6(3):57-60.
6. Mitsuo Ochi, Konsei Shino, Kazunori Yasuda, Masahiro Kurosaka *ACL Injury and Its Treatment* Springer Verlag, Japan 2016
7. Shital N. Parikh Editor *The Pediatric Anterior Cruciate Ligament Evaluation and Management Strategies* Springer International Publishing AG 2018
8. Matthew J. Salzler, Jonathan A. Stone, Christopher D. Harner *Allograft Anterior Cruciate Ligament Reconstruction 2022.* Elsevier Inc
9. Buerba, Rafael A. MD, MHS; Boden, Stephanie A. MD; Lesniak, Bryson MD. Graft Selection in Contemporary Anterior Cruciate Ligament Reconstruction. *JAAOS: Global Research and Reviews* 5(10):e21.00230, October 2021. | DOI: 10.5435/JAAOSGlobal-D-21-00230

3 Rolul si locul produselor ortobiologice in ortopedia moderna

Subiect cercetare

- Locul si rolul produselor ortobiologice in tratamentul gonartrozei
- Standardizare protocoale de tratament biologic
- Tratamente complexe - asocierea hialuronat PRP

Bibliografie

1. Thomas Collins¹ Dinesh Alexander² Bilal Barkatali² Platelet-rich plasma: a narrative review EFORT Open Rev 2021;6:225-235. DOI: 10.1302/2058-5241.6.200017
2. Murray Ir, Geeslin ag, Goudie EB, Petrigliano fa, Laprade rf. Minimum information for studies evaluating biologics in orthopaedics (MIBO): platelet-rich plasma and mesenchymal stem cells. J Bone Joint Surg Am. 2017;99(10):809-819.
3. Giuseppe Filardo Orthobiologics: Injectable Therapies for the Musculoskeletal System 1st ed. 2022 Edition
4. Bruder, Scott P, MD, PhD, Aaron, Roy, M.D. Orthobiologics Wolters Kluwer Health , martie 2023
5. Rachel M Frank & Brian J. Cole OrthoBiologics in Sports Medicine, An Issue of Clinics in Sports Medicine, 1st Edition 12/2018

4. Gonartroza – tratamentul minim invaziv

Subiect cercetare

- Artroplastia unicompartimentala cu platou mobil - personalizare indicații, elemente tehnice
- Artroplastia la pacientul tânăr – selecție clinico-imagistică
- Particularitatile artroplastiei de genunchi in gonartroza cu deformatie axiala severa in varus/valgus

Bibliografie

1. Daniel J. McCormack Darren Puttock Steven P. Godsiff Medial compartment osteoarthritis of the knee: a review of surgical options EFORT Open Rev 2021;6:113-117. DOI: 10.1302/2058-5241.6.200102
2. Stein J. Janssen Iris van Oost Stefan J.M. Breugem Rutger C.I. van Geenen A structured evaluation of the symptomatic medial Oxford unicompartimental knee arthroplasty (UKA) EFORT Open Rev 2021;6:850-860. DOI: 10.1302/2058-5241.6.200105
3. Batailler, C., Swan, J., Sappey Marinier, E., Servien, E., & Lustig, S. (2020). New Technologies in Knee Arthroplasty: Current Concepts. Journal of clinical medicine, 10(1), 47. <https://doi.org/10.3390/jcm10010047>
4. David Parker Ideal alignment for UKA: are we any closer? Journal of ISAKOS, Volume 5, Issue 4, July 2020, Pages 199-200
5. Tad Gerlinger Unicompartimental Knee Arthroplasty Springer 2019 Indications, Surgical Techniques and Complications
6. David Parker Management of Knee Osteoarthritis in the Younger, Active Patient Springer-Verlag Berlin and Heidelberg GmbH & Co. KG , ianuarie 2016

5. Printarea 3D-aplicatii in ortopedie

Subiecte cercetare

- Aplicații 3D (imagistica, planificare, imprimare) în Chirurgia de reconstrucție tumorală
- Aplicații 3D (imagistica, planificare, imprimare) în Chirurgia de reconstrucție a piciorului deformat/diabetic

Bibliografie

1. Mohammed Maniruzzaman 3D and 4D Printing in Biomedical Applications Process Engineering and Additive Manufacturing 2019 Wiley-VCH Verlag
2. Wixted, Colleen M. BS; Peterson, Jonathan R. MD; Kadakia, Rishin J. MD; Adams, Samuel B. MD. Three-dimensional Printing in Orthopaedic Surgery: Current Applications and Future Developments. JAAOS: Global Research and Reviews 5(4):p e20.00230-11, April 2021. | DOI: 10.5435/JAAOSGlobal-D-20-00230
3. Galvez, Marcelo MD; Asahi, Takeshi; Baar, Alejandro MD; Carcuro, Giovanni MD; Cuchacovich, Natalio MD; Fuentes, Jorge A. BS; Mardones, Rodrigo MD; Montoya, Carlos E. BS; Negrin, Roberto MD; Otayza, Felipe MD; Rojas, Gonzalo M. BS; Chahin, Andrés MD. Use of Three-dimensional Printing in Orthopaedic Surgical Planning. JAAOS: Global Research and Reviews 2(5):p e071, May 2018. | DOI: 10.5435/JAAOSGlobal-D-17-00071
4. Matthew Dipaola and Felasfa M. Wodajo 3D Printing in Orthopaedic Surgery Book • 2019 Elsevier Inc

6. Rolul alogrefelor in ortopedia moderna

Subiecte cercetare:

Integrarea alogrefelor-aspecte clinice, radiologice, imagistice si histologice

Rolul imagisticii in estimarea necesarului de grefa osoasa

Tehnici adjuvante de augmentare a integrării alogrefelor

1. Scheffler SU, Schmidt T, Gangéy I, et al. Fresh-frozen free-tendon allografts versus autografts in anterior cruciate ligament reconstruction: delayed remodeling and inferior mechanical function during long-term healing in sheep. *Arthroscopy* 2008; 24:448–58.

2. Ball S, Amiel D, Williams SK, et al. The effects of storage on fresh human osteochondral allografts. *Clin Orthop Relat Res* 2004; 418:246–252

3. Williams SK, Amiel D, Ball ST, et al. Prolonged storage effects on the articular cartilage of fresh human osteochondral allografts. *J Bone Joint Surg Am* 2003;85-A:2111–2120

4. Gross, A.E., Kim, W., Las Heras, F. et al. Fresh Osteochondral Allografts for Posttraumatic Knee Defects: Long-term Followup. *Clin Orthop Relat Res* 466, 1863–1870 (2008)

5. French MH, McCauley JC, Pulido PA, Braze ME, Bugbee WD. Bipolar Fresh Osteochondral Allograft Transplantation of the Tibiotalar Joint: A Concise Mid-Term Follow-up of a Previous Report★. *J Bone Joint Surg Am*. 2019 May 1;101(9):821-825.

7. Bibliografia de baza a specialitatii:

1. *Tratat de Chirurgie, vol II-Ortopedie-Traumatologie*, sub redactia Dinu M Antonescu, Irinel Popescu, Editura Academiei Romane, 2012, ISBN: 973-27-2211-4

2. *Campbell's Operative Orthopaedics*, 4-volume set, 13th Edition, ISBN-13:9780323374620

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