

BÖLÜM 10

Doppler Ultrasonografi Yardımlı Hemoroidal Arter Ligasyonu (DGHAL)

Ahmet KILINÇ¹

KİLİS DEVLET HASTANESİ GENEL CERRAHİSİ

Hemoroidal hastalık, toplumda oldukça sık görülmesi, ağrı ve kanama gibi hastaların yaşam kalitelerini ciddi düzeyde etkileyen şikayetlerin olması nedeniyle önemli bir sağlık sorunudur. Hemoroidal hastalığın tedavisinde medikal ve cerrahi yöntemler uygulanabilir (1). Hemoroidal hastalığın cerrahi tedavisi sonrasında nüks oranları düşük olmasına rağmen ameliyat sonrası oluşan ağrı problemi nedeniyle, yeni tedavi stratejileri ortaya çıkmıştır (2). Son yıllarda ligasyon temelli uygulamalar, postoperatif ağrının az olması, operasyon süresinin kısa olması, çalışma hayatına erken dönüş ve postoperatif inkontinans oranlarının düşük olması gibi avantajlarından dolayı öne çıkmaya başlamıştır (3,4,5).

Ligasyon temelli bir uygulama olan Doppler ultrasonografi yardımlı hemoroidal arter ligasyonu (DG-HAL), ilk kez 1995'te Morinaga ve arkadaşları tarafından tanımlanmıştır. Yöntem superior hemoroidal arterin sütürasyonu esasına dayanmaktadır (6). DG-HAL işlemi genel veya reyonel anestezi altında yapılabilir. Operasyon hem litotomi hem de pron (jack-knife) pozisyonunda yapılabilir. Bu işlem esnasında içerisinde doppler ultrason probu bulunan özel

¹ Op. Dr., Kilis Prof. Dr. Alaaddin Yavaşca Devlet Hastanesi, Genel Cerrahi Kliniği

KAYNAKLAR

1. Wald, A., Bharucha, A. E., Limketkai, B., Malcolm, A., Remes-Troche, J. M., Whitehead, W. E., & Zutshi, M. (2021). ACG clinical guidelines: management of benign anorectal disorders. *The American journal of gastroenterology*, 116 (10), 1987-2008.
2. Shao, W. J., Li, G. H., Zhang, Z. H., Yang, B. L., Sun, G. D., & Chen, Y. Q. (2008). Systematic review and meta-analysis of randomized controlled trials comparing stapled haemorrhoidopexy with conventional haemorrhoidectomy. *Journal of British Surgery*, 95 (2), 147-160.
3. Trenti, L., Biondo, S., Moreno, E. K., Sanchez-Garcia, J. L., Espin-Basany, E., Landaluce-Olavarria, THDLIGA-RCT Study Group. (2019). Short-term outcomes of transanal hemorrhoidal dearterialization with mucopexy versus vessel-sealing device hemorrhoidectomy for grade III to IV hemorrhoids: a prospective randomized multicenter trial. *Diseases of the Colon & Rectum*, 62 (8), 988-996.
4. De Nardi, P., Capretti, G., Corsaro, A., & Staudacher, C. (2014). A prospective, randomized trial comparing the short- and long-term results of doppler-guided transanal hemorrhoidal dearterialization with mucopexy versus excision hemorrhoidectomy for grade III hemorrhoids. *Diseases of the colon & rectum*, 57 (3), 348-353.
5. Guttenplan, M. (2017). The evaluation and office management of hemorrhoids for the gastroenterologist. *Current gastroenterology reports*, 19 (7), 1-8.
6. Morinaga, K., Hasuda, K., & Ikeda, T. (1995). A novel therapy for internal hemorrhoids: ligation of the hemorrhoidal artery with a newly devised instrument (Moricorn) in conjunction with a Doppler flowmeter. *American Journal of Gastroenterology (Springer Nature)*, 90 (4).
7. Ratto, C., Parello, A., Donisi, L., Litta, F., Zaccone, G., & Doglietto, G. B. (2012). Assessment of haemorrhoidal artery network using colour duplex imaging and clinical implications. *Journal of British Surgery*, 99 (1), 112-118.
8. Ratto, C. (2014). THD Doppler procedure for hemorrhoids: the surgical technique. *Techniques in Coloproctology*, 18 (3), 291-298.
9. Altomare, D. F., Roveran, A., Pecorella, G., Gaj, F., & Stortini, E. (2006). The treatment of hemorrhoids: guidelines of the Italian Society of Colorectal Surgery. *Techniques in coloproctology*, 10 (3), 181.
10. Scheyer, M., Antonietti, E., Rollinger, G., Mall, H., & Arnold, S. (2006). Doppler-guided hemorrhoidal artery ligation. *The American journal of surgery*, 191 (1), 89-93.
11. Trenti, L., Biondo, S., Galvez, A., Bravo, A., Cabrera, J., & Kreisler, E. (2017). Distal Doppler-guided transanal hemorrhoidal dearterialization with mucopexy versus conventional hemorrhoidectomy for grade III and IV hemorrhoids: postoperative morbidity and long-term outcomes. *Techniques in Coloproctology*, 21 (5), 337-344.
12. Alemrajabi, M., Akbari, A., Sohrabi, S., Rezazadehkermani, M., Moradi, M., Agah, S., & Masoodi, M. (2022). Simple mucopexy and hemorrhoidal artery ligation with and without Doppler guidance: a randomized clinical trial for short-term outcome. *Journal of the Korean Society of Coloproctology*.

13. Walega, P., Krokowicz, P., Romaniszyn, M., Kenig, J., Sałówka, J., Nowakowski, M., ... & Nowak, W. (2010). Dopplerguidedhaemorrhoidalarterialligationwithrecto-anal-repair (RAR) for the treatment of advancedhaemorrhoidal disease. *ColorectalDisease*, 12 (10Online), e326-e329.
14. Chauhan, A., Thomas, S., Bishnoi, P. K., & Hadke, N. S. (2007). Randomizedcontrolledtrialto assess the role of raised anal pressures in the pathogenesis of symptomatic early hemorrhoids. *DigestiveSurgery*, 24 (1), 28-32.
15. Chen, H. H. (1999). Anal manometric findings before and after hemorrhoidectomy: a preliminary report. *ChanggengYiXueZaZhi*, 22 (1), 25-30.
16. Wałęga, P., Scheyer, M., Kenig, J., Herman, R. M., Arnold, S., Nowak, M., & Cegielný, T. (2008). Two-center experience in the treatment of hemorrhoidal disease using Doppler-guided hemorrhoidal artery ligation: functional results after 1-year follow-up. *Surgicalendoscopy*, 22 (11), 2379-2383.
17. Konsten, J., & Baeten, C. G. M. I. (2000). Hemorrhoidectomy vs. Lord's method. *Diseases of the colon & rectum*, 43 (4), 503-506.
18. Qarabaki, M. A., Mukhashavria, G. A., Mukhashavria, G. G., & Giorgadze, N. G. (2014). Circular vs. three-quadrant hemorrhoidectomy for end-stage hemorrhoids: short- and long-term outcomes of a prospective randomized trial. *Journal of Gastrointestinal Surgery*, 18 (4), 808-815.
19. Zampieri, N., Castellani, R., Andreoli, R., & Geccherle, A. (2012). Long-term results and quality of life in patients treated with hemorrhoidectomy using two different techniques: Ligasure versus stapled hemorrhoidal dearterialization. *The American Journal of Surgery*, 204 (5), 684-688.
20. Elmér, S. E., Nygren, J. O., & Lenander, C. E. (2013). A randomized trial of transanal hemorrhoidal dearterialization with anopexy compared with open hemorrhoidectomy in the treatment of hemorrhoids. *Diseases of the colon & rectum*, 56 (4), 484-490.
21. Denoya, P., Tam, J., & Bergamaschi, R. (2014). Hemorrhoidal dearterialization with mucopexy versus hemorrhoidectomy: 3-year follow-up assessment of a randomized controlled trial. *Techniques in coloproctology*, 18 (11), 1081-1085.
22. Spanos, C. P., & Kaiser, A. M. (2022). Doppler-Guided Hemorrhoidal Artery Ligation. In *Chassin's Operative Strategy in General Surgery* (pp. 589-591). Springer, Cham.
23. Ortiz, H., Marzo, J., & Armendariz, P. (2002). Randomized clinical trial of stapled hemorrhoidopexy versus conventional diathermy hemorrhoidectomy. *Journal of British Surgery*, 89 (11), 1376-1381.
24. Jo, B. H., Park, J. K., Lee, I. K., Kim, H. J., Lee, Y. S., Lee, J. I., et al. (2010). Early Experience of Treatment for Symptomatic Hemorrhoids with Doppler Guided Hemorrhoidal Artery Ligation and Recto-anal Repair. *Journal of the Korean Surgical Society*, 79 (2), 116-121.
25. Ratto C (2014) THD Doppler procedure for hemorrhoids: the surgical technique. *Tech Coloproctol* 18:291-298.
26. Walega P, Romaniszyn M., Kenig J., Herman R., Nowak W., Doppler-Guided Hemorrhoid Artery Ligation with Recto-Anal-Repair Modification: Functional Evaluation and Safety Assessment of a New Minimally Invasive Method of Treatment of Advanced Hemorrhoidal Disease, *The Scientific World Journal* Volume 2012, Article ID 324040.