

Bölüm  
**10**



## SOL ANA KORONER ARTER BİFÜRKASYON LEZYONLARINA GİRİŞİM

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### Giriş

Sol ana koroner arter (LMCA), kalbin 2/3' ünü besleyen ve ciddi öneme sahip bir arterdir. Sol ventrikülün tamamını besler. LMCA' yı kritik düzeyde kaplayan lezyonlar miyokard kanlanmasında oluşacak azalma ve gelişebilecek akut koroner sendrom sonucu görülebilen miyokart enfarktüsleri nedeniyle mortalite açısından yüksek riskler taşır. LMCA anatomik olarak osteal, gövde ve distal olmak üzere üç kısımda incelenir. Distal kısım, gövdeden başlar ve son ön inen arter (LAD), sirkumfleks (Cx) ve intermedier arterlerin başladığı kısma kadar devam eder. Distal bifürkasyon bölgesinde, karşılaşılacak türbülans akım ve shear stres nedeniyle aterosklerotik lezyon gelişme ihtimali daha fazladır. Yapılan koroner anjiyografilerin %5-7' sinde LMCA lezyonu görülmektedir (1,2). Bu lezyonların yaklaşık %80 kadarı distal bifürkasyon bölgesinde görülmektedir (3,4).

### LMCA girişimi

LMCA' da önemli düzeyde darlık bulunması girişim için gereklidir. LMCA' daki darlığın ciddiyeti anjiyografi, görüntüleme tetkikleri ve FFR ile belirlenebilir. Tablo 1' de LMCA' ya girişim endikasyonları gösterilmiştir (3-7).

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**Anahtar kelimeler:** sol ana koroner, çift stent stratejisi, provizyonel stentleme, görüntüleme teknikleri

## Kaynakça

1. De Caterina AR, Cuculi F, Banning AP. Incidence, predictors and management of left main coronary artery stent restenosis: a comprehensive review in the era of drug-eluting stents. *EuroIntervention*. 2013;8(11):1326-1334. doi: 10.4244/EIJV8I11A201
2. Taylor HA, Deumite NJ, Chaitman BR, et al. Asymptomatic left main coronary artery disease in the Coronary Artery Surgery Study (CASS) registry. *Circulation*. 1989;79(6):1171-1179. doi: 10.1161/01.cir.79.6.1171
3. Stone GW, Sabik JF, Serruys PW, et al. Everolimus-eluting stents or bypass surgery for left main coronary artery disease. *N Engl J Med*. 2016;375(23):2223-2235. doi: 10.1056/NEJMoa1610227.
4. Makikallio T, Holm NR, Lindsay M, et al. Percutaneous coronary angioplasty versus coronary artery bypass grafting in treatment of unprotected left main stenosis (NOBLE): a prospective, randomised, open-label, non-inferiority trial. *Lancet*. 2016;388(10061):2743-2752. doi: 10.1016/S0140-6736(16)32052-9
5. de la Torre Hernandez JM, Hernandez Hernandez F, Alfonso F, et al. Prospective application of predefined intravascular ultrasound criteria for assessment of intermediate left main coronary artery lesions results from the multicenter LITRO study. *J Am Coll Cardiol*. 2011;58(4):351-358. doi: 10.1016/j.jacc.2011.02.064
6. Jasti V, Ivan E, Yalamançhili V, et al. Correlations between fractional flow reserve and intravascular ultrasound in patients with an ambiguous left main coronary artery stenosis. *Circulation*. 2004; 110(18):2831-2836. doi: 10.1161/01.CIR.0000146338.62813.E7
7. Windecker S, Kolh P, Alfonso F, et al. 2014 ESC/EACTS Guidelines on myocardial revascularization: the task force on myocardial revascularization of the European Society of Cardiology (ESC) and the European Association for Cardio-Thoracic Surgery (EACTS) Developed with the special contribution of the European Association of Percutaneous Cardiovascular Interventions (EAPCI). *Eur Heart J*. 2014;35(37):2541-2619. doi: 10.1093/eurheartj/ehu278
8. Mock MB, Ringqvist I, Fisher LD, et al. Survival of medically treated patients in the coronary artery surgery study (CASS) registry. *Circulation*. 1982;66(3):562-568. doi: 10.1161/01.cir.66.3.562.
9. Neumann FJ, Sousa-Uva M, Ahlsson A, et al. 2018 ESC/EACTS Guidelines on myocardial revascularization. *Eur Heart J*. 2019;40(2):87-165. doi: 10.1093/eurheartj/ehy394
10. Medina A, Suarez de Lezo J, Pan M. A new classification of coronary bifurcation lesions. *Rev Esp Cardiol*. 2006;59(2):183 [in Spanish]. doi: 10.1016/S1885-5857(06)60130-8
11. Chen S-L, Sheiban I, Xu B, et al. Impact of the complexity of bifurcation lesions treated with drug-eluting StentsThe DEFINITION Study (Definitions and impact of complex bifurcation lesions on clinical outcomes after percutaneous coronary Intervention using drug-eluting stents). *JACC Cardiovasc Interv*. 2014;7(11):1266-1276. doi: 10.1016/j.jcin.2014.04.026
12. Xu B, Redfors B, Yang Y, et al. Impact of operator experience and volume on outcomes after left main coronary artery percutaneous coronary intervention. *JACC Cardiovasc Interv*. 2016;9(20):2086-2093. doi: 10.1016/j.jcin.2016.08.011

13. Maeng M, Holm NR, Erglis A, et al. Long-term results after simple versus complex stenting of coronary artery bifurcation lesions: Nordic Bifurcation Study 5-year follow-up results. *J Am Coll Cardiol.* 2013;62(1):30-34. doi: 10.1016/j.jacc.2013.04.015
14. Chen SL, Xu B, Han YL, et al. Comparison of double kissing crush versus Culotte stenting for unprotected distal left main bifurcation lesions: results from a multicenter, randomized, prospective DKCRUSH-III study. *J Am Coll Cardiol.* 2013;61(14):1482-1488. doi: 10.1016/j.jacc.2013.01.023
15. Chen SL, Xu B, Han YL, et al. Clinical outcome after DK crush versus culotte stenting of distal left main bifurcation lesions: the 3-year follow-up results of the DKCRUSH-III study. *JACC Cardiovasc Interv.* 2015;8(10):1335-1342. doi: 10.1016/j.jcin.2015.05.017
16. D'Ascenzo F, Iannaccone M, Giordana F, et al. Provisional vs. two-stent technique for unprotected left main coronary artery disease after ten years follow up: a propensity matched analysis. *Int J Cardiol.* 2016;211:37-42. doi: 10.1016/j.ijcard.2016.02.136
17. Chevalier B, Glatt B, Royer T, et al. Placement of coronary stents in bifurcation lesions by the "culotte" technique. *Am J Cardiol.* 1998;82(8): 943-949. doi: 10.1016/s0002-9149(98)00510-4
18. Burzotta F, Dzavik V, Ferenc M, et al. Technical aspects of the T and small protrusion (TAP) technique. *EuroIntervention.* 2015;11(Suppl V):V91-V95. doi: 10.4244/EIJV-11SVA20
19. Ormiston JA, Webster MW, El Jack S, et al. Drug-eluting stents for coronary bifurcations: bench testing of provisional side-branch strategies. *Catheter Cardiovasc Interv.* 2006;67:49-55. doi: 10.1002/ccd.20453
20. Park SJ, Kim YH, Lee BK, et al. Sirolimus-eluting stent implantation for unprotected left main coronary artery stenosis: comparison with bare metal stent implantation. *J Am Coll Cardiol.* 2005;45(3):351-356. doi: 10.1016/j.jacc.2004.10.039
21. Kang SJ, Ahn JM, Song H, et al. Comprehensive intravascular ultrasound assessment of stent area and its impact on restenosis and adverse cardiac events in 403 patients with unprotected left main disease. *Circ Cardiovasc Interv.* 2011;4(6):562-569. doi: 10.1161/CIRCINTERVENTIONS.111.964643
22. Chen SL, Santoso T, Zhang JJ, et al. Clinical outcome of double kissing crush versus provisional stenting of coronary artery bifurcation lesions: the 5-year follow-up results from a randomized and multicenter DKCRUSH-II Study (Randomized Study on Double Kissing Crush Technique Versus Provisional Stenting Technique for Coronary Artery Bifurcation Lesions). *Circ Cardiovasc Interv.* 2017;10(2):e004497. doi: 10.1161/CIRCINTERVENTIONS.116.004497