

# 12.

## Bölüm

# PLEVRANIN BENİGN VE MALİGN TÜMÖRLERİNİN TANI VE TEDAVİSİ

Aslıhan GÜRÜN KAYA<sup>1</sup>

Akın KAYA<sup>2</sup>

## OLGU

Daha önceden bilinen kronik bir hastalığı olmayan 49 yaşındaki erkek hasta, sırt ve göğüs ağrısı nedeniyle başvurduğu merkezde coronavirüs-2019 hastalığı (COVID-19) tanısı almış. COVID-19 tetkikleri sırasında çekilen toraks bilgisayarlı tomografisinde (BT) sağ hemitoraksta kitle ile uyumlu lezyonu saptanması nedeniyle, hasta COVID-19 tedavisi tamamlandıktan sonra ileri tetkik için klinikimize yönlendirildi. Hastanın son birkaç aydır progresif olarak artış gösteren sağ yan ağrısı şikayeti mevcuttu. Nefes darlığı, öksürük, balgam, ateş ve kilo kaybı tarif etmiyordu. Yirmi paket-yıl sigara öyküsü vardı. Özgeçmiş bilgilerinden 4 yıl önce travma sonrası multiple kot fraktürü ve hemopnömotoraks öyküsünün olduğu; takiplerinde sağ hemitoraksta kalınlaşma izlenen hastaya başka bir merkezde Video Yardımlı Torakoskopik Cerrahi (VATS) ile plevral biyopsi uygulandığı ve patoloji sonucunun malignite açısından negatif olduğu öğrenildi.

Kliniğimizde çekilen toraks BT'de sağ alt lob lateralde yaklaşık 9x6 cm boyutlarında, medialde akciğer parankimine uzanım gösteren, kostalarda destrüksiyona neden olan ve toraks duvarına devamlılık gösteren ekstrapulmoner intratorasik yerleşimli kitle izlendi (**Resim 1**).

<sup>1</sup> Dr. Öğr. Gör Aslıhan GÜRÜN KAYA, Ankara Üniversitesi Tip Fakültesi, Göğüs Hastalıkları AD. agkaya@ankara.edu.tr

<sup>2</sup> Prof. Dr. Akın KAYA, Ankara Üniversitesi Tip Fakültesi, Göğüs Hastalıkları AD. kayaakin@gmail.com

## KAYNAKLAR

1. Lennartz S, Le Blanc M, Zopfs D, et al. Dual-Energy CT-derived Iodine Maps: Use in Assessing Pleural Carcinomatosis. *Radiology*. 2019;290(3):796-804.
2. Chaudhary V, Bano S. Differentiating pleural tumors. *Indian J Radiol Imaging*. 2014;24(4):415.
3. Takenoyama M. [Thorax/Lung and Mediastinum, Pleura: Cancer]. *Gan To Kagaku Ryoho*. 2020;47(8):1164.
4. Sureka B, Thukral BB, Mittal MK, et al. Radiological review of pleural tumors. *Indian J Radiol Imaging*. 2013;23(4):313-320.
5. Erb CT, Johnson KM, Kim AW. Rare pleural tumors. *Clin Chest Med*. 2013;34(1):113-136.
6. Galateau-Salle F, Churg A, Roggeli V, et al. The 2015 World Health Organization Classification of Tumors of the Pleura: Advances since the 2004 Classification. *J Thorac Oncol*. 2016;11(2):142-154.
7. Scherpereel A, Astoul P, Baas P, et al. Guidelines of the European Respiratory Society and the European Society of Thoracic Surgeons for the management of malignant pleural mesothelioma. *Eur Respir J*. 2010;35(3):479-495.
8. Rodriguez Panadero F. Diagnosis and treatment of malignant pleural mesothelioma. *Arch Bronconeumol*. 2015;51(4):177-184.
9. Attanoos RL, Pugh MR. The Diagnosis of Pleural Tumors Other Than Mesothelioma. *Arch Pathol Lab Med*. 2018;142(8):902-913.
10. McGrath EE, Blades Z, Needham J, et al. A systematic approach to the investigation and diagnosis of a unilateral pleural effusion. *Int J Clin Pract*. 2009;63(11):1653-1659.
11. Metintas M. Mezotelyoma. In: Özlu T, Metintas M, Karadağ M, et al., editors. *Solunum sistemi ve hastalıkları*: İstanbul Tip Yayınları; 2010. p. 1979-1995.
12. Kelly AM, Frauenfelder T. Diseases of the Chest Wall, Pleura, and Diaphragm. In: Hodler J, Kubik-Huch RA, von Schulthess GK, editors. *Diseases of the Chest, Breast, Heart and Vessels 2019-2022: Diagnostic and Interventional Imaging*. IDKD Springer Series. Cham (CH)2019. p. 95-106.
13. Mortensen C, Bhatnagar R, Edey AJ. Imaging the pleura. *Br J Hosp Med (Lond)*. 2012;73(11):626-632.
14. Cardinale L, Ardissoni F, Garetto I, et al. Imaging of benign solitary fibrous tumor of the pleura: a pictorial essay. *Rare Tumors*. 2010;2(1):e1.
15. Savaş R. Spontan Pnömotoraks ve Tedavisi. *Güncel Yaklaşımlar Özel Sayısı Türkiye Klinikleri*. 2016;7:11-16.
16. Carter BW, Betancourt SL, Shroff GS, et al. MR Imaging of Pleural Neoplasms. *Top Magn Reson Imaging*. 2018;27(2):73-82.
17. Stigt JA, Boers JE, Groen HJ. Analysis of "dry" mesothelioma with ultrasound guided biopsies. *Lung Cancer*. 2012;78(3):229-233.
18. De Paoli L, Quaia E, Poillucci G, et al. Imaging characteristics of pleural tumours. *Insights Imaging*. 2015;6(6):729-740.
19. Im JG. Imaging of the pleura. *Curr Opin Radiol*. 1991;3(3):387-393.
20. Harris GN, Rozenshtain A, Schiff MJ. Benign fibrous mesothelioma of the pleura: MR imaging findings. *AJR Am J Roentgenol*. 1995;165(5):1143-1144.
21. Falaschi F, Battolla L, Mascalchi M, et al. Usefulness of MR signal intensity in distinguishing benign from malignant pleural disease. *AJR Am J Roentgenol*. 1996;166(4):963-968.
22. Patz EF Jr, Shaffer K, Piwnica-Worms DR, et al. Malignant pleural mesothelioma: value of CT and MR imaging in predicting resectability. *AJR Am J Roentgenol*. 1992;159(5):961-966.
23. Giesel FL, Bischoff H, von Tengg-Kobligk H, et al. Dynamic contrast-enhanced MRI of malignant pleural mesothelioma: a feasibility study of noninvasive assessment, therapeutic follow-up, and possible predictor of improved outcome. *Chest*. 2006;129(6):1570-1576.
24. Coolen J, De Keyzer F, Nafteux P, et al. Malignant pleural mesothelioma: visual assessment by

- using pleural pointillism at diffusion-weighted MR imaging. *Radiology*. 2015;274(2):576-584.
- 25. Basu S, Saboury B, Torigian DA, et al. Current evidence base of FDG-PET/CT imaging in the clinical management of malignant pleural mesothelioma: emerging significance of image segmentation and global disease assessment. *Mol Imaging Biol*. 2011;13(5):801-811.
  - 26. Szolkowska M, Blasinska-Przerwa K, Knetki-Wroblewska M, et al. Malignant pleural mesothelioma: main topics of American Society of Clinical Oncology clinical practice guidelines for diagnosis and treatment. *J Thorac Dis*. 2018;10(Suppl 17):S1966-S1970.
  - 27. Cui A, Jin XG, Zhai K, et al. Diagnostic values of soluble mesothelin-related peptides for malignant pleural mesothelioma: updated meta-analysis. *BMJ Open*. 2014;4(2):e004145.
  - 28. Sallach SM, Sallach JA, Vasquez E, et al. Volume of pleural fluid required for diagnosis of pleural malignancy. *Chest*. 2002;122(6):1913-1917.
  - 29. Swiderek J, Morcos S, Donthireddy V, et al. Prospective study to determine the volume of pleural fluid required to diagnose malignancy. *Chest*. 2010;137(1):68-73.
  - 30. Koegelenberg CF, Irusen EM, von Groote-Bidlingmaier F, et al. The utility of ultrasound-guided thoracentesis and pleural biopsy in undiagnosed pleural exudates. *Thorax*. 2015;70(10):995-997.
  - 31. Metintas M, Yildirim H, Kaya T, et al. CT Scan-Guided Abrams' Needle Pleural Biopsy versus Ultrasound-Assisted Cutting Needle Pleural Biopsy for Diagnosis in Patients with Pleural Effusion: A Randomized, Controlled Trial. *Respiration*. 2016;91(2):156-163.
  - 32. Valdez-Lopez HG, Cano-Rodriguez AI, Montemayor-Chapa M, et al. [Diagnostic reliability of close pleural biopsy: Tru-cut vs. Cope]. *Rev Med Inst Mex Seguro Soc*. 2018;56(1):12-17.
  - 33. Dixon G, de Fonseka D, Maskell N. Pleural controversies: image guided biopsy vs. thoracoscopy for undiagnosed pleural effusions? *J Thorac Dis*. 2015;7(6):1041-1051.
  - 34. Cao YY, Fan N, Xing F, et al. Computed tomography-guided cutting needle pleural biopsy: Accuracy and complications. *Exp Ther Med*. 2015;9(1):262-266.
  - 35. Koegelenberg CF, Bolliger CT, Theron J, et al. Direct comparison of the diagnostic yield of ultrasound-assisted Abrams and Tru-Cut needle biopsies for pleural tuberculosis. *Thorax*. 2010;65(10):857-862.
  - 36. Froudarakis ME, Anevlavis S, Marquette CH, et al. Medical Thoracoscopy Implementation after a European Respiratory Society Course Held from 2003 to 2016: A Survey. *Respiration*. 2021;1-7.
  - 37. Sundaralingam A, Bedawi EO, Rahman NM. Diagnostics in Pleural Disease. *Diagnostics (Basel)*. 2020;10(12).
  - 38. Mehrotra M, D'Cruz JR, Arthur ME. Video-Assisted Thoracoscopy. *StatPearls*. Treasure Island (FL)2021.
  - 39. Katzman D, Sterman DH. Updates in the diagnosis and treatment of malignant pleural mesothelioma. *Curr Opin Pulm Med*. 2018;24(4):319-326.
  - 40. Wald O, Sugarbaker DJ. Perspective on malignant pleural mesothelioma diagnosis and treatment. *Ann Transl Med*. 2016;4(6):120.
  - 41. Flores RM, Pass HI, Seshan VE, et al. Extrapleural pneumonectomy versus pleurectomy/decortication in the surgical management of malignant pleural mesothelioma: results in 663 patients. *J Thorac Cardiovasc Surg*. 2008;135(3):620-626, 626 e621-623.
  - 42. Flores RM. Surgical options in malignant pleural mesothelioma: extrapleural pneumonectomy or pleurectomy/decortication. *Semin Thorac Cardiovasc Surg*. 2009;21(2):149-153.
  - 43. Minatel E, Trovo M, Polesel J, et al. Tomotherapy after pleurectomy/decortication or biopsy for malignant pleural mesothelioma allows the delivery of high dose of radiation in patients with intact lung. *J Thorac Oncol*. 2012;7(12):1862-1866.
  - 44. Kondola S, Manners D, Nowak AK. Malignant pleural mesothelioma: an update on diagnosis and treatment options. *Ther Adv Respir Dis*. 2016;10(3):275-288.
  - 45. Low EM, Khouri GG, Matthews AW, et al. Prevention of tumour seeding following thoracoscopy in mesothelioma by prophylactic radiotherapy. *Clin Oncol (R Coll Radiol)*. 1995;7(5):317-

318.

46. De Ruysscher D, Slotman B. Treatment of intervention sites of malignant pleural mesothelioma with radiotherapy: a Dutch-Belgian survey. *Radiother Oncol.* 2003;68(3):299-302.
47. Wong RM, Ianculescu I, Sharma S, et al. Immunotherapy for malignant pleural mesothelioma. Current status and future prospects. *Am J Respir Cell Mol Biol.* 2014;50(5):870-875.
48. Hayama N, Hattori S, Takahashi G, et al. Cytokine/Chemokine/Growth Factor Levels in Malignant Pleural Effusion of Non-small Cell Lung Cancer. *Tokai J Exp Clin Med.* 2020;45(4):224-229.
49. Noro R, Kobayashi K, Usuki J, et al. Bevacizumab plus chemotherapy in nonsquamous non-small cell lung cancer patients with malignant pleural effusion uncontrolled by tube drainage or pleurodesis: A phase II study North East Japan Study group trial NEJ013B. *Thorac Cancer.* 2020;11(7):1876-1884.
50. Grove CS, Lee YC. Vascular endothelial growth factor: the key mediator in pleural effusion formation. *Curr Opin Pulm Med.* 2002;8(4):294-301.