

8.

Bölüm

PLEVRAL EFÜZYONLARDA CERRAHİ YAKLAŞIMLAR

Yunus SEYREK¹

Efsun DURUKAN²

Levent CANSEVER³

OLGU

Elli-iki yaşında erkek hasta, 2 aydır artan nefes darlığı ve halsizlik şikayeti ile hastanemizin göğüs hastalıklarına aciline başvurdu. Hastanın posteroanterior akciğer grafisinde (PA) sol hemitoraksta plevral efüzyon saptandı. Acil polikliniğimizde terapötik torasentez ile boşaltma gerçekleştirildi ve transüda-eksüda ayrımı amacıyla plevral sıvı örneği alındı. Hastanın plörezi eksüda ile uyumlu geldi. Hastada C reaktif protein (CRP) ve lökosit yüksekliği görüldü. Anamnezde ateş hikayesi yer almadı. Hastaya acilde sol tüp torakostomi ve sualtı drenajı (TT+KSAD) uygulandıktan sonra göğüs hastalıkları kliniğine yatırıldı. Hastadan alınan plevral sıvının patolojik ve mikrobiyolojik incelemelerinden anlamlı sonuç çıkmadı. Balgam, idrar ve kan örneklerinde de herhangi bir patolojik üreme görülmedi. Hastaya non-spesifik antibiyotik tedavisi başlandı. Takiplerinde plörezi kaybolan hastanın kan değerleri ve kliniği de düzeldi. Hastanın TT'si sonlandırıldı ve göğüs hastalıkları kliniğinden taburcu edildi.

Hasta taburculuğu takiben üç hafta sonra benzer şekilde nefes darlığı şikayeti ile tekrar hastanemizin aciline başvurdu. Çekilen PA akciğer grafisinde önceki başvuru gibi sol tarafta plörezi saptandı (**Resim 1**). Hastaya toraks bilgisayarlı

¹ Op. Dr. Yunus SEYREK, Sağlık Bilimleri Üniversitesi, Mehmet Akif Ersoy Göğüs ve Kalp Damar Cerrahisi Eğitim ve Araştırma Hastanesi, Göğüs Cerrahi Kliniği, yunusseyrek@gmail.com

² Araş. Gör. Dr. Efsun DURUKAN, Sağlık Bilimleri Üniversitesi, Yedikule Göğüs Hastalıkları ve Göğüs Cerrahisi Eğitim ve Araştırma Hastanesi, Göğüs Cerrahisi Kliniği, efsundrkn@gmail.com

³ Prof. Dr. Levent CANSEVER, Sağlık Bilimleri Üniversitesi, Yedikule Göğüs Hastalıkları ve Göğüs Cerrahisi Eğitim ve Araştırma Hastanesi, Göğüs Cerrahisi Kliniği, lcansever@yahoo.com

KAYNAKLAR

1. Sahn SA, Heffner JE. Pleural fluid analysis. In: Light RW, Lee YCG, eds. Textbook of pleural diseases. 2nd edn. London:Arnold Press, 2008; 209: e26.
2. Moore KL, Dalley AF. Clinically Oriented Anatomy. 4th ed. Baltimore: Williams & Wilkins; 1999; 94-100.
3. Light RW, Macgregor MI, Luchsinger PC et al. Pleural effusions: the diagnostic separation of transudates and exudates. *Ann Intern Med.* 1972;77:507-13.
4. Light RW. Diagnostic principles in pleural disease. *Eur Respir J* 1997;10:476-81.
5. Light RW (ed). Pleural Effusion Due to Miscellaneous Diseases in Pleural Diseases 6th ed. Philadelphia: Lippincott Williams and Wilkins, 2013.
6. Puchalski J. Thoracentesis and the risks for bleeding: a new era. *Curr Opin Pulm Med* 2014;20(4):377-84.
7. Hibbert RM, et al. Safety of ultrasound-guided thoracentesis in patients with abnormal preprocedural coagulation parameters. *Chest* 2013;144(2):456-63.
8. Puchalski JT, et al. The safety of thoracentesis in patients with uncorrected bleeding risk. *Ann Am Thorac Soc* 2013;10(4):336-41.
9. Levine H, Cugell DW. Blunt end needle biopsy of pleura and rib. *Arch Intern Med* 1971;109:516-25.
10. Cao YY, et al. Computed tomography-guided cutting needle pleural biopsy: Accuracy and complications. *Exp Ther Med* 2015;9(1):262-6.
11. Koegelenberg CF, et al. Direct comparison of the diagnostic yield of ultrasound-assisted Abrams and Tru-Cut needle biopsies for pleural tuberculosis. *Thorax* 2010;65(10):857-62.
12. Stigt JA, Boers JE, Groen HJ. Analysis of, dry mesothelioma with ultrasound guided biopsies. *Lung Cancer* 2012;78(3):229-33.
13. Caccavale RJ, Lewis RJ. Video-assisted thoracic surgery as a diagnostic tool. In: Shields TW,Lo Cicero III J,Ponn RB eds. General Thoracic Surgery 5th edition Lippincott Williams&Wilkins 2000: Volume 1 Ch18;285-93.
14. Rahman NM, Ali NJ, Brown G, et al. British Thoracic Society Pleural Disease Guideline Group. Local anaesthetic thoracoscopy: British Thoracic Society Pleural Disease Guideline 2010. *Thorax* 2010;Suppl 2:54-60.
15. Pompeo E, Mineo D, Rogliani P, et al : Feasibility and results of awake thoracoscopic resection of solitary pulmonary nodules. *Ann Thorac Surg.* 2004 Nov;78(5):1761-8.
16. Bayram S, Tezel Ç, Cesur E, et al, The feasibility of awake thoracic epidural anesthesia in patients requiring VATS wedge resection, *Eur Respir J* 2013; 42.
17. Colice GL, Curtis A, Deslauriers J, et al. Medical and surgical treatment of parapneumonic effusions: an evidence-based guideline. *Chest* 2000; 118: 1158-71
18. Eastlander JA. Resection des cotes dans empyema chronique. *Rev. Med. Chir. (Paris)* 1879; 3: 156.
19. Heffner JE, McDonald J, Barbieri C, et al. Management of parapneumonic effusions. An analysis of physician practice patterns. *Arch Surg* 1995; 130: 433-8.
20. Andrews NC, Parker EF, Shaw RR, et al. Management of nontuberculous empyema. *Am Rev Respir Dis* 1962; 85: 935-6.
21. Davies CW, Kearney SE, Gleeson FV, et al. Predictors of outcome and long-term survival in patients with pleural infection. *Am J Respir Crit Care Med* 1999; 160: 1682-7.
22. Alfageme I, Muñoz F, Peña N, et al. Empyema of the thorax in adults. Etiology, microbiologic findings and management. *Chest* 1993; 103: 839-43.
23. Sahn SA. Management of complicated parapneumonic effusions. *Am Rev Respir Dis* 1993; 148: 813-7.
24. Rahman H, Misra JK, Srivastava AK, et al. Treatment of empyema thoracis with intercostal tube drainage. *Indian J Pediatr* 1981; 48: 105-7.

25. Manuel Porcel J, Vives M, Esquerda A, et al. Usefulness of the British Thoracic Society and the American College of Chest Physicians guidelines in predicting pleural drainage of non-purulent parapneumonic effusions. *Respir Med* 2006; 100: 933-7.
26. Davies RJ, Traill ZC, Gleeson FV. Randomised controlled trial of intrapleural streptokinase in community acquired pleural infection. *Thorax* 1997; 52: 416-21.
27. Bouros D, Schiza S, Tzanakis N, et al. Intrapleural urokinase versus normal saline in the treatment of complicated parapneumonic effusions and empyema: A randomized, double-blind study. *Am J Respir Crit Care Med* 1999; 159: 37-42.
28. Maskell NA, Davies CW, Nunn AJ, et al. U.K. Controlled trial of intrapleural streptokinase for pleural infection. *N Engl J Med* 2005; 352: 865-74.
29. Tokuda Y, Matsushima D, Stein GH, et al. Intrapleural fibrinolytic agents for empyema and complicated parapneumonic effusions: a meta-analysis. *Chest* 2006; 129: 783-90.
30. Light RW. Management of parapneumonic effusions. *Arch Intern Med* 1981; 141: 1339-41.
31. Mitri RK, Brown SD, Zurakowski D, et al. Outcomes of primary image-guided drainage of parapneumonic effusions in children. *Pediatrics* 2002; 110: e37.
32. Luh SP, Chou MC, Wang LS, et al. Video-assisted thoracoscopic surgery in the treatment of complicated parapneumonic effusions or empyemas: outcome of 234 patients. *Chest* 2005; 127: 1427-32.
33. Silen ML, Naunheim KS. Thoracoscopic approach to the management of empyema thoracis: indications and results. *Chest Surg Clin N Am* 1996; 6: 491-9.
34. Pothula V, Krellenstein DJ. Early aggressive surgical management of parapneumonic empyemas. *Chest* 1994; 105: 832-6.
35. Rzyman W, Skokowski J, Romanowicz G, et al. Decortication in chronic pleural empyema . effect on lung function. *Eur J Cardiothorac Surg* 2002; 21: 502-7.
36. Hurvitz RJ, Tucker BL. The Eloesser flap: past and present. *J Thorac Cardiovasc Surg* 1986; 92: 958-61.
37. Burrows CM, Matthews C, Colt HG. Predicting survival in patients with recurrent symptomatic malignant pleural effusions: An assessment of the prognostic values of physiologic, morphologic, and quality of life measures of extent of disease. *Chest* 2000; 117: 73-8.
38. Roberts ME, Neville E, Berrisford RG, et al; BTS Pleural Disease Guideline Group. Management of a malignant pleural effusion: British Thoracic Society Pleural Disease Guideline 2010. *Thorax* 2010; 65: ii32-40.
39. Koşar F. Malign pleural efüzyona yaklaşım. *Güncel Göğüs Hastalıkları Serisi* 2013; 1: 108-14.
40. Antunes G, Neville E, Duffy J, et al. Pleural Diseases Group, Standards of Care Committee, British Thoracic Society. BTS guidelines for the management of malignant pleural effusions. *Thorax* 2003; 58(Suppl 2): ii29-38.
41. Muduly DK, Deo SVS, Subi TS, et al. An update in the management of malignant pleural effusion. *Indian Journal of Palliative Care* 2011; 17: 98-103.
42. Dresler CM, Olak J, Herndon JE 2nd, et al; Cooperative Groups Cancer and Leukemia Group B; Eastern Cooperative Oncology Group; North Central Cooperative Oncology Group; Radiation therapy Oncology Group. Phase III intergroup study of talc poudrage vs talc slurry sclerosis for malignant pleural effusion. *Chest* 2005; 127: 909-15.
43. Leverenz A, Heckmayr M, Tischer-Neuhauss R, et al. Intrapleural palliative treatment of malignant pleural effusions with talcum versus placebo (pleural tube alone) [abstract data only]. *Lung Cancer* 2000; 29A: 274-5.
44. Batrel HF, Yüksel M. Plevral efüzyona yaklaşım: Cerrahi perspektif. *Toraks Dergisi* 2002; 3: 10-6.
45. Hausheer FH, Yarbrow JW. Diagnosis and treatment of malignant pleural effusion. *Semin Oncol* 1985; 12: 54-75.
46. Kennedy L, Rusch VW, Strange C, et al. Pleurodesis using talc slurry. *Chest* 1994; 106: 342-6.
47. Yim AP, Chan AT, Lee TW, et al. Thoracoscopic talc insufflation versus talc slurry for sympto-

- matic malignant pleural effusion. *Ann .orac Surg* 1996; 62: 1655-8.
48. Marom EM, Patz EF Jr, Erasmus JJ, et al. Malignant pleural effusions: treatment with small-bore-catheter thoracostomy and talc pleurodesis. *Radiology* 1999; 210: 277-81.
 49. Leung L, Hsin M, Lam KC. Management of malignant pleural effusion: Options and recommended approaches. *thoracic Cancer* 2013; 4: 9-13.
 50. Colt HG. therapeutic thoracoscopy. *Clin Chest Med* 1998; 19: 383-94.
 51. Fry WA, Khandekar JD. Parietal pleurectomy for malignant pleural effusion. *Ann Surg Oncol* 1995; 2: 160-4.
 52. Harvey JC, Erdman CB, Beattie EJ. Early experience with videothoroscopic hydrodissection pleurectomy in the treatment of malignant pleural effusion. *J Surg Oncol* 1995;59: 243-5.
 53. Yim APC, Chung SS, Lee TW, Lam CK, Ho JK. thoroscopic management of malignant pleural effusions. *Chest* 1996; 109: 1234-8.
 54. Martini N, Bains MS, Beattie EJ Jr. Indications for pleurectomyin malignant effusion. *Cancer* 1975; 35: 734-8.
 55. Ozkan B, Toker A. Malin efüzyonlarda ploro-peritonealşant. *TTD Plevra Bülteni*. S: 20-2.
 56. Ponn RB, Blancafl or J, D'Agostino RS, et al. Pleuroperitoneal shunting for intractable pleural effusions. *Ann .orac Surg* 1991: 51; 605-9.
 57. Genc O, Petrou M, Ladas G, et al. the long-term morbidity of pleuroperitoneal shunts in the management of recurrent malignant effusions. *Eur J Cardiothorac Surg*2000; 18: 143-6.
 58. Suzuki K, Servais EL, Rizk NP, et al. Palliation and pleurodesis in malignant pleural effusion: the role for tunneled pleural catheters. *J thoracOncol* 2011; 6: 762-7.