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GİRİŞ

Görüntüleme yöntemlerinin ve yaşam süresinin artması ile birlikte pankreatik kistlerin insidansı %40-50'lere dayanmıştır (1,2). Kullanılan görüntüleme yöntemleri ile birlikte tespit edilen pankreatik kist oranı değişmekle birlikte manyetik rezonans kolanjiopankreatografide (MRCP) oran %49'lara varmaktadır (3). Pankreas kistleri neoplastik ve non-neoplastik olmak üzere ikiye ayrılırlar. Pankreas kistik hastalıkları, benign bir durumdan malign hastalığa kadar geniş bir yelpazede karşımıza çıkmakla birlikte aralarında ayırım yapmak güç ancak önemlidir (4). Yapılan çalışmalarda neoplastik kistlerin malignleşme ihtimalinin yıllık %0,24 arttığına gösterilmesi ve tedavi modalitelerinin değişmesi nedeniyle nedeneyle pankreas kisti saptanmasıyla birlikte neoplastik ve non-neoplastik kistlerinin ayırımı yapılmalıdır (5).

Non-neoplastik kistler içerisinde gerçek kist, pankreas asiner kistik transformasyonu, retansiyon kisti, lenfoepitelyal kist, müsinöz non-neoplastik kist ve psödokist bulunmakla birlikte karşımıza en sık psödokistler çıkmaktadır (6). Psödokistler epitelyum içermezler. Genellikle hastalar akut ya

da kronik pankreatit öyküsüne sahiptirler. Çekilen bilgisayarlı tomografi ya da manyetik rezonans görüntülemesinde septa, lokülasyon, solid komponent ve kist duvarı kalsifikasyonunun olmaması psödokist lehinedir (7) (Resim 1).



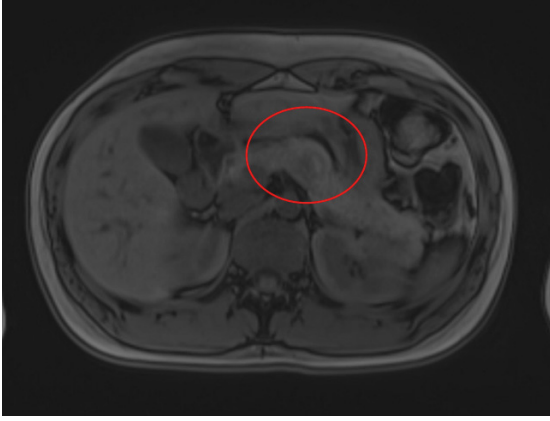
Resim 1. Bilgisayarlı Tomografide aksiyel kesitte görülen psödokist.

Neoplastik kistler arasında seröz kistik neoplazmlar (SKN), müsinöz kistik neoplazmlar (MKN), İntraduktal papiller müsinöz neoplazi (IPMN) ve solid psödopapiller neoplazi (SPN) yer almaktadır. IPMN'ler ana kanal tutulumlu, yandal tutulumlu ve mixt tip olmak üzere üçe ayrılırlar. Neoplastik kistler, demografik veri, görüntüleme

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Resim 4. Pankreas gövde kesiminde kistik açıklıklar barındıran 23x21 mm boyutunda SPN.

Metastatik davranış ve lokal tekrarlamaya olasılığı nedeniyle tedavi cerrahi rezeksiyondur. Mükün olduğunda senkron veya aralıklı metastazların rezeksiyonu da önerilir (43,46). Birçok kurumsal incelemede tüm hastalarda tam rezeksiyondan sonra 5 yıllık sağ kalım %100 elde edilmiştir (44). Metastatik hastalık varlığında bile uzun süreli sağ kalım bildirilmiştir (34,45).

KAYNAKLAR

- Moris M, Bridges MD, Pooley RA, et al. Association Between Advances in High-Resolution Cross-Section Imaging Technologies and Increase in Prevalence of Pancreatic Cysts From 2005 to 2014. *Clin Gastroenterol Hepatol* 2016; 14:585.
- Kromrey ML, Bülow R, Hübner J, et al. Prospective study on the incidence, prevalence and 5-year pancreatic-related mortality of pancreatic cysts in a population-based study. *Gut* 2018; 67:138.
- De Jong K, Nio C. Y, Hermans JJ, et al. High Prevalence of Pancreatic Cysts Detected by Screening Magnetic Resonance Imaging Examinations. *Clinical Gastroenterology and Hepatology* 2010;8:806 – 811
- Del Chiaro M, Segersvärd R, Pozzi Mucelli R, Comparison of preoperative conference-based diagnosis with histology of cystic tumors of the pancreas, *Ann Surg Oncol* 2014 May;21(5):1539-44.
- Vege SS, Ziring B, Jain R Moayyedi, P, Clinical Guidelines Committee, American Gastroenterology Association. American gastroenterological association institute guideline on the diagnosis and management of asymptomatic neoplastic pancreatic cysts. *Gastroenterology* 2015, 148, 819–822.
- Khalid A, McGrath K, *Classification of pancreatic cysts*, Uptodate. https://www.uptodate.com/contents/classification-of-pancreatic-cysts?source=history_widget[Accessed: 30th September 2024]
- Modi B, Shires GT, Pancreatic Cancer, Cystic Pancreatic Neoplasms, and Other Nonendocrine Pancreatic Tumors, *Sleisenger and Fordtran's Gastrointestinal and Liver Disease*, 11 ed.
- Gupta A, Chennatt J J, Mandal C, et al. (March 28, 2023) Approach to Cystic Lesions of the Pancreas: Review of Literature. *Cureus* 15(3): e36827.
- Valsangkar NP, Morales-Oyarvide V, Thayer SP, 851 resected cystic tumors of the pancreas: a 33-year experience at the Massachusetts General Hospital, *Surgery*. 2012 Sep; 152(3 0 1): S4–12.
- Khalid A, Brugge WR. ACG practice guidelines for the diagnosis and management of neoplastic pancreatic cysts. *Am J Gastroenterol* 2007; 102:2339.
- Wu J, Jiao Y, Dal Molin M, et al. Whole-exome sequencing of neoplastic cysts of the pancreas reveals recurrent mutations in components of ubiquitin-dependent pathways. *Proc Natl Acad Sci U S A* 2011; 108:21188.
- Singhi AD, McGrath K, Brand RE, et al. Preoperative next-generation sequencing of pancreatic cyst fluid is highly accurate in cyst classification and detection of advanced neoplasia. *Gut* 2018; 67:2131.
- McCarty TR, Garg R, Rustagi T. Pancreatic cyst fluid glucose in differentiating mucinous from nonmucinous pancreatic cysts: a systematic review and meta-analysis. *Gastrointest Endosc* 2021; 94:698.
- Galanis C, Zamani A, Cameron J, et al. Resected serous cystic neoplasms of the pancreas: a review of 158 patients with recommendations for treatment. *J Gastrointest Surg* 2007;11:820.
- Hwang K, Kim H, Kang C, et al. Serous cystadenoma of the pancreas: Appraisal of active surgical strategy before it causes problems. *Surg Endosc* 2012;26:1560–5.
- Farrell JJ, Cystic lesions of the pancreas, chapter 78, *Yamada's Textbook of Gastroenterology*.
- Panarelli N, Park K, Hruban R et al. Microcystic serous cystadenoma of the pancreas with subtotal cystic degeneration: another neoplastic mimic of pancreatic pseudocyst. *Am J Surg Pathol* 2012;36:726–31.
- Singh, RR, Gopakumar H, Sharma NR, Diagnosis and Management of Pancreatic Cysts: A Comprehensive Review of the Literature. *Diagnostics* 2023, 13, 550.
- Kosmahl M, Pauser U, Peters K, et al. Cystic tumors of the pancreas and tumor-like lesions with cystic features: a review of 418 cases and a classification proposal. *Virchows Arch* 2004;445:168–78.
- Cripp S, Fernandez-Del Castillo C, Salvia R, et al. Mucin-producing neoplasms of the pancreas: an analysis of distinguishing clinical and epidemiological characteristics. *Clin Gastroenterol Hepatol* 2010;8:213–9. 182.
- Compagno J, Oertel J. Mucinous cystic neoplasms of the pancreas with overt and latent malignancy (cystadenocarcinoma and cystadenoma). A clinicopathologic study of 41 cases. *Am J Clin Pathol* 1978;69:573–80.
- Compagno J, Oertel JE. Mucinous cystic neoplasms of the pancreas with overt and latent malignancy (cystadenocarcinoma and cystadenoma). *Am J Clin Pathol* 1978;69:573–580.
- Stark A, Donahue TR, Reber HA, et al. Pancreatic Cyst Disease A Review, *JAMA*. 2016;315(17):1882-1893.

24. Campbell F, Azadeh B. Cystic neoplasms of the exocrine pancreas. *Histopathology* 2008;52:539–51.
25. Kimura W, Sasahira N, Yoshikawa T, et al. Duct-ectatic type of mucin producing tumor of the pancreas--new concept of pancreatic neoplasia. *Hepatogastroenterology* 1996; 43:692-709.
26. Basar O, Brugge WR. My treatment approach: pancreatic cysts. *Mayo Clinic Proc* 2017;92(10):1519.
27. Lee LS. Updates in diagnosis and management of pancreatic cysts. *World J Gastroenterol* 2021; 27(34): 5700-5714.
28. Menon G, Hoilat GJ, Babiker HM, et al. , Mucinous Cystic Pancreatic Neoplasms, *StatPearls Publishing*; 2024 Jan.
29. Postlewait LM, Ethun CG, McInnis MR, et al. Association of Preoperative Risk Factors With Malignancy in Pancreatic Mucinous Cystic Neoplasms A Multicenter Study , *JAMA Surg.* 2017 Jan 1; 152(1): 19–25.
30. Koong AC, Christofferson E, Le QT, et al. Phase II study to assess the efficacy of conventionally fractionated radiotherapy followed by a stereotactic radiosurgery boost in patients with locally advanced PC. *Int J Radiat Oncol Biol Phys* 2005;63(2):320–3.
31. Longnecker D, Adler G, Hruban R, et al. Intraductal papillary-mucinous neoplasms of the pancreas. In: Hamilton S, Aaltonen L, editors. *World Health Organization classification of tumours: Pathology and genetics of tumours of the digestive system*. Lyon, France: IARC Press; 2000. pp 237–40.
32. Schnelldorfer T, Sarr M, Nagorney D, et al. Experience with 208 resections for intraductal papillary mucinous neoplasm of the pancreas. *Arch Surg* 2008;143:639–46.
33. Brugge W, Lauwers G, Sahani D, et al. Cystic neoplasms of the pancreas. *N Engl J Med* 2004;351:1218–26.
34. Papavramidis T, Papavramidis S. Solid pseudopapillary tumors of the pancreas: review of 718 patients reported in English literature. *J Am Coll Surg* 2005;200:965–72.
35. Choi S, Kim SM, Oh JT, et al. Solid pseudopapillary tumor of the pancreas: a multicenter study of 23 pediatric cases. *J Pediatr Surg* 2006;41:1992–5.
36. Kloppel G, Luttges J, Klimstra D, et al. Solid-pseudopapillary neoplasm. In: Hamilton SR, Aaltonen LA, editors. *World Health Organization classification of tumours. Pathology and genetics of tumours of the digestive system*. Lyon, France: IARC Press; 2000. p. 246–8.
37. Serra S, Salahshor S, Fagih M, et al. Nuclear expression of E-cadherin in solid pseudopapillary tumors of the pancreas. *J Pancreas* 2007;8:296–303.
38. Chetty R, Jain D, Serra S. p120 catenin reduction and cytoplasmic relocation leads to dysregulation of E-cadherin in solid pseudopapillary tumors of the pancreas. *Am J Clin Pathol* 2008;130.
39. Buetow PC, Buck JL, Pantongrag-Brown L, et al. Solid and papillary epithelial neoplasm of the pancreas: imaging-pathologic correlation on 56 cases. *RadioLOGY.* 1996;199:707–711.
40. Choi JY, Kim MJ, Kim JH et al. Solid pseudopapillary tumor of the pancreas: typical and atypical manifestations. *AJR Am J Roentgenol.* 2006;187:W178–W186.
41. Lanke G, Ali FS, Lee JH. Clinical update on the management of pseudopapillary tumor of pancreas. *World J Gastrointest Endosc* 2018; 10(9): 145-155.
42. Stoita A, Earls P, Williams D. Pancreatic solid pseudopapillary tumours - EUS FNA is the ideal tool for diagnosis. *ANZ J Surg.* 2010;80:615–618.
43. Reddy S, Cameron J, Scudiere J, et al. Surgical management of solid pseudopapillary neoplasms of the pancreas (Franz or Hamoudi tumors): a large single-institution series. *J Am Coll Surg* 2009;208:950–7.
44. Matos J, Grutzmann R, Agaram N, et al. Solid pseudopapillary neoplasms of the pancreas: a multi-institutional study of 21 patients. *J Surg Res* 2009;157:e137–42.
45. Butte J, Brennan M, Goene M, et al. Solid pseudopapillary tumors of the pancreas. Clinical features, surgical outcomes, and long-term survival in 45 consecutive patients from a single center. *J Gastrointest Surg* 2011;15:350–7.