

Fungal spondylodiscitis in a patient recovered from H7N9 virus infection: a case study and a literature review of the differences between *Candida* and *Aspergillus* spondylodiscitis

Supplemental material

Case reports or case serials related to the *Candida* or *Aspergillus* spondylodiscitis

1. Ackerman G, Bayley JC: **Candida albicans osteomyelitis in a vertebral body previously infected with *Serratia marcescens***. *Spine* 1990, **15**(12):1362-1363.
2. Almekinders LC, Greene WB: **Vertebral Candida infections. A case report and review of the literature**. *Clinical Orthopaedics & Related Research* 1991, **267**(267):174-178.
3. Alvarez L, Abril C: **Articular aspergillosis: case report**. *Clinical Infectious Diseases* 1995, **20**(2):457-460.
4. Anan S, Sanjeev R, Andrea H, Goran M, Yaw AA: **Aspergillus rib and vertebral osteomyelitis in a former intravenous drug user**. *American Journal of Medicine* 2004, **116**(116):208-209.
5. Anderson J, Kron IL: **Treatment of Aspergillus infection of the proximal aortic prosthetic graft with associated vertebral osteomyelitis**. *Journal of Vascular Surgery* 1984, **1**(4):579-581.
6. Andrew H, Clifton H, Subra K: **Vertebral osteomyelitis due to Candida parapsilosis in a child with Crohn disease while receiving anti-TNF therapy**. *Journal of Pediatric Gastroenterology & Nutrition* 2013, **56**(4).
7. Barbara Alexander L, Elizabeth Dodds A, Steele MP, Perfect JR: **Aspergillus fumigatus empyema, arthritis, and calcaneal osteomyelitis in a lung transplant patient successfully treated with posaconazole**. *Journal of Clinical Microbiology* 2004, **42**(3):1376-1378.
8. Bridwell KH, Campbell JW, Barenkamp SJ: **Surgical treatment of hematogenous vertebral Aspergillus osteomyelitis**. *Spine* 1976, **15**(4):281-285.
9. Brown DL, Musher DM, Taffet GE: **Brown DL, Musher DM, Taffet GE. Hematogenously acquired Aspergillus vertebral osteomyelitis in seemingly immunocompetent drug addicts**. *Western Journal of Medicine* 1987, **147**(1):84-85.
10. Bruns J, Hemker T, Dahmen G: **Fungal spondylitis. A case of *Torulopsis glabrata* and *Candida tropicalis* infection**. *Acta Orthopaedica Scandinavica* 1986, **57**(6):563-565.
11. Byrd BF, Weiner MH, Mcgee ZA: **Aspergillus spinal epidural abscess**. *Jama* 1982, **248**(248):3138-3139.
12. Castelli C, Benazzo F, Minoli L, Marone P, Seghezzi R, Carlizzi CN: **Aspergillus infection of the L3-L4 disc space in an immunosuppressed heart transplant patient**. *Spine* 1976, **15**(12):1369-1373.
13. Chang HM, Yu HH, Yang YH, Lee WI, Lee JH, Wang LC, Lin YT, Chiang BL: **Successful treatment of Aspergillus flavus spondylodiscitis with epidural abscess in a patient with chronic granulomatous disease**. *Pediatric Infectious Disease Journal* 2012, **31**(1):100-101.
14. Chi CY, Fung CP, Liu CY: **Aspergillus flavus epidural abscess and osteomyelitis in a diabetic patient**. *Journal of microbiology, immunology, and infection* 2003, **36**(2):145-148.
15. Chia SL, Tan BH, Tan CT, Tan SB: **Candida spondylodiscitis and epidural abscess:**

- management with shorter courses of anti-fungal therapy in combination with surgical debridement. *Journal of Infection* 2005, **51**(1):17-23.
16. Christelle D-L, Claire L, Frédérique C-G, Lucia P, Emmanuelle D: **Candida albicans diskitis after body piercing in an immunocompetent patient.** *Joint Bone Spine* 2013, **80**(2):226–227.
 17. Cone LA, Byrd RG, Potts BE, Moxell W: **Diagnosis and treatment of Candida vertebral osteomyelitis: clinical experience with a short course therapy of amphotericin B lipid complex.** *Surgical neurology* 2004, **62**(3):234–237.
 18. Cortet B, Richard R, Deprez X, Lucet L, Flipo RM, Le Loët X, Duquesnoy B, Delcambre B: **Aspergillus spondylodiscitis: successful conservative treatment in 9 cases.** *Journal of Rheumatology* 1994, **21**(7):1287-1291.
 19. Derkinderen P, Bruneel F, Bouchaud O, Regnier B: **Spondylodiscitis and epidural abscess due to Candida albicans.** *European spine journal* 2000, **9**(1):72-74.
 20. D'Hoore K, Hoogmartens M: **Vertebral aspergillosis. A case report and review of the literature.** *Acta Orthopaedica Belgica* 1993, **59**(3):306-314.
 21. Dietz R, Huber G, Thetter O, Volkmer I: **Aspergillosis of the lung with osteoclasia and paraplegia.** *Neuroradiology* 1982, **23**(4):219-221.
 22. Dijkmans BAC, Broek PJVD, Meer JWMVD, Koolen MI, Mouton RP, Falke THM: **Hematogenous candida vertebral osteomyelitis treated with ketoconazole.** *Infection* 1982, **10**(5):290-292.
 23. Edwards JE, Turkel SB, Elder HA, Rand RW, Guze LB: **Hematogenous candida osteomyelitis. Report of three cases and review of the literature.** *American Journal of Medicine* 1975, **59**(1):89–94.
 24. Eisen DP, Macginley R, Christensson B, Larsson L, Woods ML: **Candida tropicalis vertebral osteomyelitis complicating epidural catheterisation with disease paralleled by elevated D-arabinitol/L-arabinitol ratios.** *European Journal of Clinical Microbiology* 2000, **19**(1):61-63.
 25. Eismont FJ, Bohlman HH, Soni PL, Goldberg VM, Freehafer AA: **Pyogenic and fungal vertebral osteomyelitis with paralysis.** *Journal of Bone & Joint Surgery* 1983, **65**(1):19-29.
 26. Ersoy A, Akdag I, Akalin H, Sarisozen B, Ener B: **Aspergillosis osteomyelitis and joint infection in a renal transplant recipient.** *Transplantation Proceedings* 2007, **39**(5):1662–1663.
 27. Ersoy A, Dizdar OS, Koc AO: **Aspergillus fumigatus spondylodiskitis in renal transplant patient: voriconazole experience.** *Experimental & Clinical Transplantation* 2011, **9**(4):265-269.
 28. Ferra C, Gingrich RD: **Candida tropicalis vertebral osteomyelitis: A late sequela of fungemia.** *Clinical Infectious Diseases* 1994, **19**(4):697-703.
 29. Frazier DD, Campbell DR, Garvey TA, Wiesel S, Bohlman HH, Eismont FJ: **Fungal infections of the spine. Report of eleven patients with long-term follow-up.** *Journal of Bone & Joint Surgery American Volume* 2001, **83-a**(83-A):560-565.
 30. Friedman BC, Simon GL: **Candida vertebral osteomyelitis: report of three cases and a review of the literature.** *Diagnostic Microbiology & Infectious Disease* 1987, **8**(1):31–36.
 31. Gathe JC, Jr., Harris RL, Garland B, Jr.: **Candida osteomyelitis. Report of five cases and review of the literature.** *American Journal of Medicine* 1987, **82**(5):927–937.

32. Glotzbach RE: **Aspergillus terreus infection of pseudoaneurysm of aortofemoral vascular graft with contiguous vertebral osteomyelitis.** *American journal of clinical pathology* 1982, **77**(2):224-227.
33. Govender S, Rajoo R, Goga IE, Charles RW: **Aspergillus osteomyelitis of the spine.** *Spine* 1991, **16**(7):746-749.
34. Grandiere-Perez L, Asfar P, Foussard C, Chennebault J, Penn P, Degasne I: **Spondylodiscitis due to Aspergillus terreus during an efficient treatment against invasive pulmonary aspergillosis.** *Intensive Care Medicine* 2000, **26**(7):1010-1011.
35. Grossman M: **Aspergillosis of bone.** *British Journal of Radiology* 1975, **48**(565):57-59.
36. Gupta PK, Mahapatra AK, Gaiind R, Bhandari S, Musa MM, Lad SD: **Aspergillus spinal epidural abscess.** *Pediatric Neurosurgery* 2001, **35**(1):18-23.
37. Mouas H, Lutsar I, Dupont B, Fain O, Herbrecht R, Lescure F, Lortholary O: **Voriconazole for invasive bone aspergillosis: a worldwide experience of 20 cases.** *Clinical Infectious Diseases* 2005, **40**(8):1141-1147.
38. Hendrickx L, Wijngaerden EV, Samson I, Peetermans WE: **Candidal vertebral osteomyelitis: report of 6 patients, and a review.** *Clinical Infectious Diseases* 2001, **32**(4):527-533.
39. Hennequin C, Bourée P, Hiesse C, Dupont B, Charpentier B: **Spondylodiskitis due to Candida albicans: report of two patients who were successfully treated with fluconazole and review of the literature.** *Clinical Infectious Diseases* 1996, **23**(1):176-178.
40. Herzog W, Perfect J, Roberts L: **Intervertebral diskitis due to Candida tropicalis.** *Southern medical journal* 1989, **82**(2):270-273.
41. Hirschmann JV, Everett ED: **Candida vertebral osteomyelitis.** *Journal of Bone & Joint Surgery American Volume* 1976, **58**(4):573-575.
42. Holmes PF, Osterman DW, Tullos HS: **Aspergillus discitis. Report of two cases and review of the literature.** *Clinical Orthopaedics & Related Research* 1988, **226**(226):240-246.
43. Hummel M, Schüler S, Weber U, Schwertlick G, Hempel S, Theiss D, Rees W, Mueller J, Hetzer R: **Aspergillosis with Aspergillus osteomyelitis and diskitis after heart transplantation: surgical and medical management.** *Journal of Heart & Lung Transplantation* 1993, **12**(4):599-603.
44. Hung CC, Chang SC, Yang PC, Hsieh WC: **Invasive pulmonary pseudallescheriasis with direct invasion of the thoracic spine in an immunocompetent patient.** *European Journal of Clinical Microbiology & Infectious Diseases* 1994, **13**(9):749-751.
45. Ingwer I, Mcleish KR, Tight RR, White AC: **Aspergillus fumigatus epidural abscess in a renal transplant recipient.** *Archives of Internal Medicine* 1978, **138**(1):153-153.
46. Iwata A, Ito M, Abumi K, Sudo H, Kotani Y, Shono Y, Minami A: **Fungal Spinal Infection Treated with Percutaneous Posterolateral Endoscopic Surgery.** *Central European Neurosurgery* 2014, **75**(3):170-176.
47. Seres JL, Ono H, Benner EJ: **Aspergillosis presenting as spinal cord compression. Case report.** *Journal of Neurosurgery* 1972, **36**(2):221-224.
48. Javier P, Isidro J, María B, Emilia C, Miguel S, Rosario DL, Araceli M: **Spondylodiscitis caused by Candida krusei: case report and susceptibility patterns.** *Journal of Clinical Microbiology* 2006, **44**(5):1912-1914.
49. Jiang Z, Wang Y, Jiang Y, Xu Y, Meng B: **Vertebral osteomyelitis and epidural abscess due to Aspergillus nidulans resulting in spinal cord compression: Case report and literature**

- review.** *Journal of International Medical Research* 2013, **41**(2):502-510.
50. Jonnalagadda S, Veerabagu MP, Rakela J, Kusne S, Randhawa P, Rabinovitz M: **Candida albicans osteomyelitis in a liver transplant recipient: a case report and review of the literature.** *Transplantation* 1996, **62**(8):1182-1184.
 51. Jorge G, Isabelle S, Daniel L, Kalthum BW, Peter R: **An unusual cause of vertebral osteomyelitis: Candida species.** *Scandinavian Journal of Infectious Diseases* 2003, **35**(4):288-291.
 52. Jorge VC, Cardoso C, Noronha C, Simões J, Riso N, Vaz RM: **Fungal spondylodiscitis in a non-immunocompromised patient.** *Bmj Case Reports* 2012, **2012**:bcr1220115337.
 53. Karthik K, Shetty AP, Rajasekaran S: **Spontaneous cord transection due to invasive aspergillus spondylitis in an immunocompetent child.** *European Spine Journal* 2011, **20**(2 Supplement):188-192.
 54. Kashimoto T, Kitagawa H, Kachi H: **Candida Tropicalis Vertebral Osteomyelitis and Discitis.** *Spine* 1986, **11**(1):57-61.
 55. Kelesidis T, Tsiodras S: **Successful treatment of azole-resistant Candida spondylodiscitis with high-dose caspofungin monotherapy.** *Rheumatology International* 2012, **32**(9):2957-2958.
 56. Kolbe ABL, Mckinney AM, Kendi ATK, Misselt D: **Aspergillus meningitis and discitis from low-back procedures in an immunocompetent patient.** *Acta radiologica* 2007, **48**(6):687-689.
 57. Lang EW, Pitts LH: **Intervertebral disc space infection caused by Aspergillus fumigatus.** *European Spine Journal* 1996, **5**(3):207-209.
 58. Langlois RP, Flegel KM, Meakins JL, Morehouse DD, Robson HG, Guttman RD: **Cutaneous aspergillosis with fatal dissemination in a renal transplant recipient.** *Canadian Medical Association journal* 1980, **122**(6):673-676.
 59. Laurent S, Daniel VL, Christian B, Antoine DT, Oscar M, Francois P, Daniel G: **Candida glabrata spinal osteomyelitis involving two contiguous lumbar vertebrae: a case report and review of the literature.** *Diagnostic Microbiology & Infectious Disease* 2003, **45**(2):137-141.
 60. Lenzi J, Agrillo A, Santoro A, Marotta N, Cantore GP: **Postoperative spondylodiscitis from Aspergillus fumigatus in immunocompetent subjects.** *Journal of Neurosurgical Sciences* 2004, **48**(2):81-85.
 61. Parry MF, Grant B, Yukna M, Adler-Klein D, McLeod GX, Taddonio R, Rosenstein C: **Candida osteomyelitis and diskitis after spinal surgery: an outbreak that implicates artificial nail use.** *Clinical Infectious Diseases* 2001, **32**(3):352-357.
 62. Martinez M, Lee AS, Hellinger WC, Kaplan J: **Vertebral Aspergillus Osteomyelitis and Acute Diskitis in Patients With Chronic Obstructive Pulmonary Disease.** *Mayo Clinic Proceedings Mayo Clinic* 1999, **74**(6):579-583.
 63. Mary Jane B, Pratik S, Edwin S: **Misidentification of Candida parapsilosis as C famata in a clinical case of vertebral osteomyelitis.** *American Journal of the Medical Sciences* 2011, **341**(1):71-73.
 64. Mawk JR, Erickson DL, Chou SN, Seljeskog EL: **Aspergillus infections of the lumbar disc spaces. Report of three cases.** *Journal of Neurosurgery* 1983, **58**(2):270-274.
 65. Mcgregor A, Mcnicol D, Collignon P: **Aspergillus-induced discitis. A role for itraconazole**

- in therapy?** *Spine* 1976, **17**(12):1512-1514.
66. Mckee DF, Barr WM, Bryan CS, Lunceford EM: **Primary aspergillosis of the spine mimicking Pott's paraplegia.** *Journal of Bone & Joint Surgery American Volume* 1985, **66**(9):1481-1483.
 67. Miller DJ, Mejicano GC: **Vertebral osteomyelitis due to Candida species: case report and literature review.** *Clinical Infectious Diseases* 2001, **33**(4):523-530.
 68. Morgenlander JC, Rossitch E, Rawlings CE: **Aspergillus disc space infection: case report and review of the literature.** *Neurosurgery* 1989, **25**(1):126-129.
 69. Mullins RF, Jr JMS, Savage J, Davis JB, Law EJ: **Osteomyelitis of the spine in a burn patient due to Candida albicans.** *Burns Journal of the International Society for Burn Injuries* 1993, **19**(2):174–176.
 70. Munk PL, Lee MJ, Poon PY, O'Connell JX, Coupland DB, Janzen DL, Logan PM, Dvorak MF: **Candida osteomyelitis and disc space infection of the lumbar spine.** *Skeletal Radiology* 1997, **26**(1):42-46.
 71. Nandeesh BN, Usha K, Betty A: **Vertebral osteomyelitis with a rare etiology diagnosed by fine-needle aspiration cytology.** *Diagnostic Cytopathology* 2010, **38**(5):360-363.
 72. Nandeesh S, Sujit Kumar T, Sakthivel B, Naresh D, Sathyanarayana V: **Aspergillus spondylodiscitis in an immunocompetent patient following spinal anesthesia.** *Orthopaedic surgery* 2014, **6**(1):72-77.
 73. Nasca RJ, Mcelvein RB: **Aspergillus fumigatus osteomyelitis of the thoracic spine treated by excision and interbody fusion.** *Spine* 1976, **10**(9):848-850.
 74. Sinthumathi N, Georgi A, Milly M, Lalitha MK, Srinivasan CN: **Secondary sternal Aspergillus osteomyelitis in a diabetic hemodialysis patient with previous allograft rejection.** *Hemodialysis International* 2007, **11**(4):403–405.
 75. Neale TJ, Muir JC, Mills H, Horne JG, Jones MR: **Candida albicans vertebral osteomyelitis in chronic renal failure.** *Postgraduate Medical Journal* 1987, **63**(742):1059-1060.
 76. Nicolle A, Blanchardière A, De La, Bonhomme J, Hamon M, Leclercq R, Hitier M: **Aspergillus vertebral osteomyelitis in immunocompetent subjects: case report and review of the literature.** *Infection* 2013, **41**(4):833-840.
 77. Oh IS, Seo JY, Ha KY, Kim YC: **Treatment for Multiple Aspergillus Spondylitis Including a Hip Joint.** *Asian Spine Journal* 2009, **3**(2):106–112.
 78. Oksi J, Finnilä T, Hohenthal U, Rantakokko-Jalava K: **Candida dubliniensis spondylodiscitis in an immunocompetent patient. Case report and review of the literature.** *Medical Mycology Case Reports* 2014, **3**:4-7.
 79. Ooij AV, Beckers JM, Herpers MJ, Walenkamp GH: **Surgical treatment of aspergillus spondylodiscitis.** *European Spine Journal* 2000, **9**(1):75-79.
 80. Korovessis P, Repanti M, Katsardis T, Stamatakis M: **Anterior decompression and fusion for Aspergillus osteomyelitis of the lumbar spine associated with paraparesis.** *Spine* 1994, **19**(23):2715-2718.
 81. Palmisano A, Benecchi M, Filippo MD: **Candida sake as the causative agent of spondylodiscitis in a hemodialysis patient.** *The Spine Journal* 2011, **11**(3):e12–e16.
 82. Park KU, Lee HS, Kim CJ, Kim EC: **Fungal discitis due to Aspergillus terreus in a patient with acute lymphoblastic leukemia.** *Journal of Korean Medical Science* 2000, **15**(6):704-707.

83. Park SB, Kang MJ, Whang EA, Han SY, Kim HC: **A case of fungal sepsis due to aspergillus spondylitis followed by cytomegalovirus infection in a renal transplant recipient.** *Transplantation Proceedings* 2004, **36**(7):2154-2155.
84. Pennisi AK, Davis DO, Wiesel S, Moskovitz P: **CT appearance of Candida diskitis.** *Journal of Computer Assisted Tomography* 1985, **9**(6):1050-1054.
85. Peters-Christodoulou MN, de Beer FC, Bots GT, Ottenhoff TM, Thompson J, Van 'T Wout J: **Treatment of postoperative Aspergillus fumigatus spondylodiscitis with itraconazole.** *Scandinavian Journal of Infectious Diseases* 1991, **23**(3):373-376.
86. Pohjola-Sintonen S, Ruutu P, Tallroth K: **Hematogenous Candida spondylitis. A case report.** *Acta Medica Scandinavica* 1984, **215**(1):85-87.
87. Rachapalli SM, Malaiya R, Mohd T, Hughes RA: **Successful treatment of Candida discitis with 5-flucytosine and fluconazole.** *Rheumatology International* 2010, **30**(11):1543-1544.
88. Ranjan R, Mishra S, Ranjan S: **Aspergillus vertebral osteomyelitis in an immunocompetent person.** *Neurology India* 2010, **58**(5):806-807.
89. Redmond A, Carré IJ, Biggart JD, Mackenzie DWR: **Aspergillosis (Aspergillus nidulans) involving bone.** *Journal of Pathology & Bacteriology* 1965, **89**(1):391-395.
90. Rhame FS, Brown B, Thompson RJ: **Aspergillus osteomyelitis: Report of four cases and review of the literature.** *American Journal of Medicine* 1982, **73**(2):295-300.
91. Rössel P, Schönheyder HC, Nielsen H: **Fluconazole therapy in Candida albicans spondylodiscitis.** *Infectious Diseases* 1998, **30**(5):527-530.
92. Brandt SJ, Thompson RL, Wenzel RP: **Mycotic pseudoaneurysm of an aortic bypass graft and contiguous vertebral osteomyelitis due to Aspergillus fumigatus.** *American Journal of Medicine* 1985, **79**(79):259-262.
93. Salvalaggio PRO, Bassetti M, Lorber MI, Micheletto GC, Friedman AL, Andriole VT, Basadonna GP: **Aspergillus vertebral osteomyelitis after simultaneous kidney-pancreas transplantation.** *Transplant Infectious Disease* 2003, **5**(5):187-190.
94. Savall F, Dedouit F, Telmon N, Rougé D: **Candida albicans spondylodiscitis following an abdominal stab wound: forensic considerations.** *Journal of Forensic & Legal Medicine* 2014, **23**(2):1-3.
95. Schilling A, Seibold M, V, Gleissner B: **Successfully treated Candida krusei infection of the lumbar spine with combined caspofungin/posaconazole therapy.** *Medical Mycology* 2008, **46**(1):79-83.
96. Schubert M, Schär G, Curt A, Dietz V: **Aspergillus spondylodiscitis in an immunocompetent paraplegic patient.** *Spinal cord* 1998, **36**(11):800-803.
97. Sebastiani GD, Galas F: **Spondylodiscitis due to Candida tropicalis as a cause of inflammatory back pain.** *Clinical Rheumatology* 2001, **20**(6):435-437.
98. Shaikh BS, PhD PCAM, Aber RC: **Vertebral disc space infection and osteomyelitis due to candida albicans in a patient with acute myelomonocytic leukemia.** *Cancer* 1980, **45**(5):1025-1028.
99. Shaw FW, Warthen HJ: **Aspergillosis of Bone.** *Southern medical journal* 1936, **29**(11):1070-1071.
100. Son JM, Jee WH, Jung CK, Kim SI, Ha KY: **Aspergillus spondylitis involving the cervico-thoraco-lumbar spine in an immunocompromised patient: a case report.** *Korean Journal of Radiology* 2007, **8**(5):448-451.

101. Storm L, Lausch KR, Arendrup MC, Mortensen KL, Petersen E: **Vertebral infection with *Candida albicans* failing caspofungin and fluconazole combination therapy but successfully treated with high dose liposomal amphotericin B and flucytosine.** *Medical Mycology Case Reports* 2014, **6**:6-9.
102. Stratov I, Korman TM, Johnson PDR: **Management of *Aspergillus* osteomyelitis: report of failure of liposomal amphotericin B and response to voriconazole in an immunocompetent host and literature review.** *European Journal of Clinical Microbiology & Infectious Diseases* 2003, **22**(5):277-283.
103. Studemeister A, Stevens DA: ***Aspergillus* Vertebral Osteomyelitis in Immunocompetent Hosts: Role of Triazole Antifungal Therapy.** *Clinical Infectious Diseases* 2011, **52**(1):e1-6.
104. Sugar AM, Saunders C, Diamond RD: **Successful treatment of *Candida* osteomyelitis with fluconazole. A noncomparative study of two patients.** *Diagnostic Microbiology & Infectious Disease* 1990, **13**(6):517-520.
105. Taillandier J, Alemanni M, Cerrina J, Ladurie FLR, Dartevelle P: ***Aspergillus* osteomyelitis after heart-lung transplantation.** *Journal of Heart & Lung Transplantation* 1997, **16**(4):436-438.
106. Takagi K, Yoshida A, Yamauchi T, Yamashita T, Iwasaki H, Tsutani H, Maezawa Y, Baba H, Ueda T: **Successful treatment of *Aspergillus* spondylodiscitis with high-dose itraconazole in a patient with acute myelogenous leukemia.** *Leukemia* 2001, **15**(10):1670-1671.
107. Tan AC, Parker N, Arnold M: ***Candida glabrata* vertebral osteomyelitis in an immunosuppressed patient.** *International Journal of Rheumatic Diseases* 2014, **17**(2):229-231.
108. Tang TJ, Janssen HL, Ch VDV, de Man RA, Metselaar HJ, Tilanus HW, De MS: ***Aspergillus* osteomyelitis after liver transplantation: conservative or surgical treatment?** *European Journal of Gastroenterology & Hepatology* 2000, **12**(1):123-126.
109. Tew CW, Han FC, Jureen R, Tey BH: ***Aspergillus* vertebral osteomyelitis and epidural abscess.** *Singapore medical journal* 2009, **50**(4):437, e151-e154.
110. Turner DL, Johnson SA, Rule SA: **Successful treatment of candidal osteomyelitis with fluconazole following failure with liposomal amphotericin B.** *Journal of Infection* 1999, **38**(1):51-53.
111. Vaishya S, Sharma MS: **Spinal *aspergillus* vertebral osteomyelitis with extradural abscess: case report and review of literature.** *Surgical neurology* 2004, **61**(6):551-555.
112. Vinas F, King P, Diaz F: **Spinal *aspergillus* osteomyelitis.** *Clinical Infectious Diseases* 1999, **28**(6):1223-1229.
113. Assaad W, Nuchikat PS, Cohen L, Esguerra JV, Whittier FC: ***Aspergillus* discitis with acute disc abscess.** *Spine* 1976, **19**(19):2226-2229.
114. Wéclawiak H, Garrouste C, Kamar N, Linas M-D, Tall P, Dambrin C, Durand D, Rostaing L: ***Aspergillus fumigatus*-related spondylodiscitis in a heart transplant patient successfully treated with voriconazole.** *Transplantation Proceedings* 2007, **39**(8):2627-2628.
115. Werner BC, Hogan MV, Shen FH: ***Candida lusitanae* discitis after discogram in an immunocompetent patient.** *Spine Journal* 2011, **11**(10):e1-e6.
116. Williams RL, Fukui MB, Meltzer CC, Swarnkar A, Johnson DW, Welch W: **Fungal spinal osteomyelitis in the immunocompromised patient: MR findings in three cases.** *American Journal of Neuroradiology* 1999, **20**(20):381-385.

117. Witzig RS, Greer DL, Jr HN: **Aspergillus flavus mycetoma and epidural abscess successfully treated with itraconazole.** *Journal of medical and veterinary mycology* 1996, **34**(2):133-137.
118. Zhu LP, Chen XS, Wu JQ, Yang FF, Weng XH: **Aspergillus vertebral osteomyelitis and ureteral obstruction after liver transplantation.** *Transplant Infectious Disease* 2011, **13**(2):192-199.