World Journal of *Clinical Cases*

World J Clin Cases 2022 May 26; 10(15): 4713-5123





Published by Baishideng Publishing Group Inc

W J C C World Journal of Clinical Cases

Contents

Thrice Monthly Volume 10 Number 15 May 26, 2022

EDITORIAL

4713 Diet and intestinal bacterial overgrowth: Is there evidence?

Souza C, Rocha R, Cotrim HP

MINIREVIEWS

4717 Definition and classification of acute-on-chronic liver diseases

Zhang YY, Meng ZJ

4726 Management of neurosurgical patients during coronavirus disease 2019 pandemics: The Ljubljana, Slovenia experience

Velnar T, Bosnjak R

ORIGINAL ARTICLE

Clinical and Translational Research

- 4737 Glycolytic and fatty acid oxidation genes affect the treatment and prognosis of liver cancer Zou JY, Huang YJ, He J, Tang ZX, Qin L
- 4761 Detection of a novel panel of 24 genes with high frequencies of mutation in gastric cancer based on nextgeneration sequencing

Zeng HH, Yang Z, Qiu YB, Bashir S, Li Y, Xu M

Case Control Study

4776 Outcomes of cervical degenerative disc disease treated by anterior cervical discectomy and fusion with self-locking fusion cage

Zhang B, Jiang YZ, Song QP, An Y

4785 Impact of COVID-19 pandemic on clinicopathological features of transplant recipients with hepatocellular carcinoma: A case-control study

Akbulut S, Sahin TT, Ince V, Yilmaz S

Retrospective Study

- 4799 Risk factors and optimal predictive scoring system of mortality for children with acute paraquat poisoning Song Y, Wang H, Tao YH
- 4810 Application effect of thoracoscopic tricuspid valvuloplasty in geriatric patients with tricuspid valve disease

Jiang W, Long XM, Wei KQ, Li SC, Zhang Z, He BF, Li H

4818 Endoscopic ultrasonography in the evaluation of condition and prognosis of ulcerative colitis Jin RF, Chen YM, Chen RP, Ye HJ



Contents Thrice Monthly Volume 10 Number 15 May 26, 2022 4827 Dynamic interaction nursing intervention on functional rehabilitation and self-care ability of patients after anenzysm surgery Xie VE, Huang WC, Li YP, Deng JH, Huang JT Clinical Trials Study 4836 Validations of new cut-offs for surgical drains management and use of computerized tomography scan after pancreatoduodenectomy: The DAI/CUT trial Caputo D, Coppola A, La Vaccara V, Pasca R, Carbone L, Ciccazzi M, Angeletti S, Coppola R Observational Study Psychosocial adaptation and influencing factors among patients with chemotherapy-induced peripheral neuropathy Zhoo X, Wang DY, Dang CY, Lui H, Sun ZQ 4856 Outcome of the efficacy of Chinese berbal medicine for functional constipation: A systematic review and meta-analysis Lyn Z, Fan Y, But Y, Lin T, Zhong LL, Liang HF 4878 Familial gastrointestinal stromal tumors with KIT germline mutation in a Chinese family: A case report Yuan W. Huang W. Ren L, Xu C, Luan LJ, Huang J, Xue AW, Fang Y, Gao XD, Sken KT, Lv JH, Hou YY 4886 Nonfunctional pancreatic neuroendocrine tumours misdiagnosed as autoinmune pancreatitis: A case report and review of literature Lin ZQ, Li X, Wang Y, Zhang XY, Zhang XX, Guo J 4896 4904 Importance of abdominal X-ray to confirm the position of levonorgestrel-releasing intrauterine system: A case report Zhu XJ, Lin SY, L	World Journal of Clinical CasesContentsThrice Monthly Volume 10 Number 15 May 26, 2022		
 4827 Dynamic interaction nursing intervention on functional rehabilitation and self-care ability of patients after aneutysm surgery. <i>Xie YE, Huang WC, Li YP, Deng JH, Huang JT</i> 4836 Validations of new cut-offs for surgical drains management and use of computerized tomography scan after pancreatoduodenectomy: The DAI/CUT trial <i>Caputo D, Coppola A, La Vaccara F, Passa R, Carbone L, Ciccozzi M, Angeletti S, Coppola R</i> 4848 Observational Study 4849 Psychosocial adaptation and influencing factors among patients with chemotherapy-induced peripheral metropathy. <i>Zhoi X, Wang DP, Ding CY, Liu H, Sun ZQ</i> 4856 Obtervational Study 4857 Obtervational study <i>IFA - ANALYSIS</i> 4856 Obtervational stromal tumors with <i>KIT</i> germline mutation in a Chinese family: A case report <i>Yuan W, Huang W, Ren L, Xia C, Luan LJ, Huang J, Xue AW, Fang Y, Gao XD, Shen KT, Lv JH, Hon YY</i> 4868 Nordructional pancreatic neuroendocrine tumours misdiagnosed as autoimmune pancreatitis: A case report and review of literature. <i>Lin ZQ, Li X, Yang Y, Zhang XY, Zhang XY, Gao J</i> 4904 Importance of abdominal X-ray to confirm the position of levonorgestrel-releasing intrauterine system: A case report <i>Zuu X, Lin SX, Liq T, Jung 1J</i> 4917 Paradoxical hermation after decompressive craniectomy provoked by mamitol: A case report <i>Zuu X, Lin SX, Liq T, Jung 1J</i> 4918 Paradoxical hermation after decompressive craniectomy provoked by mamitol: A case report <i>Zuu X, Lin SX, Liq T, Jung 1J</i> 4929 Nonfunctional bladder paraganglioma misdiagnosed as hemangioma: A case report <i>Du C, Tang IJF an SM</i> 4929 Nonfunctional bladder paraganglioma misdiagnosed as hemangioma: A case report <i>Du C, Tang IJF an SM</i> 4929 Nonfunctional bladder paraganglioma misdiagnosed as hemangioma: A case report <i>Chen J, Yang IJF</i> 			
 Xie YE, Huang WC, Li YP, Deng JH, Huang JT Clinical Trials Study Validations of new cut-offs for surgical drains management and use of computerized tomography scan after pancreatoduodenectomy: The DALCUT trial Caputo D, Coppola A, La Vaccara Y, Passa R, Carbone L, Ciccetti M, Angeletti S, Coppola R Observational Study Psychosocial adaptation and influencing factors among patients with chemotherapy-induced peripheral neuropathy Zhou X, Wang DY, Ding CY, Liu H, Son ZQ META-ANALYSIS Outcome of the efficacy of Chinese herbal medicine for functional constipation: A systematic review and meta-analysis Lyu Z, Far Y, Bai Y, Liu T, Zhong LL, Liang IF CASE REPORT Familial gastrointestinal stromal tumors with KIT germline mutation in a Chinese family: A case report Yuan W, Huang W, Ren L, Xu C, Luan LJ, Huang J, Xue AW, Fang Y, Gao XD, Shen KT, Lv JH, Hou YT 4886 Nonfunctional pancreatic neuroendocrine tumours misdiagnosed as autoimmune pancreatitis: A case report and review of literature Int ZQ, Li X, Yang Y, Wang Y, Zhang XY, Zhang XX, Guo J 4895 Sudden deafness as a prodrome of cerebellar artery infarction: Three case reports Li BL, Xu Y, Lin S 4904 Importance of abdominal X-ray to confirm the position of levonorgestrel-releasing intrauterine system: A case report Machagathi A, Kato K, Hayashi N, Nagaishi M, Kawana K 4911 Bedside ultrasonic localization of the nasogastric tube in a patient with severe COVID-19: A case report Zhu XL Liu SX. Li QT, Juang XJ 4927 Paradoxical herniation after decompressive craniectomy provoked by mannitol: A case report Du C, Tang HJ, Fan SM 4928 Nonfunctional bladder paragangtioma misdiagnosed as hermangioma: A case report Chen J, Yang HF 	4827	Dynamic interaction nursing intervention on functional rehabilitation and self-care ability of patients after aneurysm surgery	
 Clinical Trials Study Validations of new cut-offs for surgical drains management and use of computerized tomography scan after pancreatoduodemectomy: The DALCUT trial <i>Caputo D, Coppola A, La Vaccara V, Passa R, Carbone L, Ciccazzi M, Angeletti S, Coppola R</i> Observational Study Psychosocial adaptation and influencing factors among patients with chemotherapy-induced peripheral neuropathy. <i>Zhou X, Wang DY, Ding CY, Liu H, Sun ZQ</i> META-ANALYSIS Outcome of the efficacy of Chinese herbal medicine for functional constipation: A systematic review and meta-analysis. <i>Lyu Z, Fan Y, Bal Y, Liu T, Zhong LL, Liang IFF</i> CASE REPORT Familial gastrointestinal stromal tumors with <i>KIT</i> germline mutation in a Chinese family: A case report <i>Yuan W, Huang W, Ren L, Xu C, Luan LJ, Huang J, Xue AW, Fang Y, Gao XD, Shen KT, Lv JH, Hou YY</i> 4886 Nonfunctional pancreatic neuroendocrine tumours misdiagnosed as autoimmune pancreatitis: A case report and review of literature. <i>Lin ZQ, Li X, Yang Y, Wang Y, Zhang XY, Zhang XY, Guo J</i> 4895 Sudden deafness as a prodrome of cerebellar artery infarction: Three case reports <i>Li BL, Nu T, Lin S</i> 4904 Importance of abdominal X-ray to confirm the position of levonorgestrel-releasing intrauterine system: A case report <i>Zhu XJ, Liu S, Ling YJ</i> 4915 Bedside ultrasonic localization of the nasogastric tube in a patient with severe COVID-19: A case report <i>Zhu XJ, Liu S, Ling YJ</i> 4917 Paradoxical herniation after decompressive craniectomy provoked by mannitol: A case report <i>Du C, Tang IM, Fan SM</i> 4928 Targeted next-generation sequencing identifies a novel nonsense mutation in ANK1 for hereditary spheroxytosis A case report <i>Fu P. Juo YT, Chen K, Shao JB, Luo XJ, Yang JW, Jung SY</i> 4928 Nonfunctional bladder paraganglioma misdiagnosed as hemangioma: A case report <i>Chen J, Yang HF</i> 		Xie YE, Huang WC, Li YP, Deng JH, Huang JT	
 4836 Validations of new cut-offs for surgical drains management and use of computerized tomography scan after pancreatoduodenectomy: The DALCUT trial <i>Caputo D, Cappola A, La Vaccara V, Passa R, Carbone L, Ciccazti M, Angeletti S, Cappola R</i> 4843 Psychosocial adaptation and influencing factors among patients with chemotherapy-induced peripheral neuropathy <i>Zhou X, Wang DY, Dang CY, Lui H, Sun ZQ</i> 4843 META-ANALYSIS 4856 Outcome of the efficacy of Chinese herbal medicine for functional constipation: A systematic review and meta-analysis <i>Lyu Z, Fan Y, Bai Y, Lui T, Zhong LL, Liang HF</i> 4878 CASE REPORT 4886 Nonfunctional stury <i>Lui T, Zhong LL, Liang HF</i> 4886 CASE REPORT 4886 Nonfunctional pancreatic neuroendocrine tumours misdiagnosed as autoimmune pancreatitis: A case report <i>Yuan W, Huang W, Ren L, Xu C, Luan LJ, Huang J, Xue AW, Fang Y, Gao XD, Shen KT, Lv JH, Hou YY</i> 4886 Nonfunctional pancreatic neuroendocrine tumours misdiagnosed as autoimmune pancreatitis: A case report and review of literature <i>Lin ZQ, Li X, Yang Y, Zhang XY, Zhang XX, Guo J</i> 4895 Studden deafness as a prodrome of cerebellar artery infarction: Three case reports <i>Li BL, Xu JY, Lin S</i> 4904 Importance of abdominal X-ray to confirm the position of levonorgestrel-releasing intrauterine system: A case report <i>Maebyashi N, Kayashi N, Nagashi M, Kawana K</i> 4911 Bedside ultrasonic localization of the nasogastric tube in a patient with severe COVID-19: A case report <i>Du C, Tang H, Fan SM</i> 4929 Nonfunctional hermiation after decompressive craniectomy provoked by mannitol: A case report <i>Du C, Tang H, Fan SM</i> 4929 Nonfunctional bladder paraganglioma misdiagnosed as hemangioma: A case report <i>Chen J, Yang IF</i> 		Clinical Trials Study	
 Coputo D. Coppola A. La Vaccara V. Passa R. Carbone L. Ciccozzi M. Angeletti S. Coppola R Observational Study Psychosocial adaptation and influencing factors among patients with chemotherapy-induced peripheral neuropathy Zhou X. Wang DP. Ding CY. Liu H. Sun ZQ META-ANALYSIS Outcome of the efficacy of Chinese herbal medicine for functional constipation: A systematic review and meta-analysis Lyu Z. Fan Y. Bai Y. Liu T. Zhong LL. Liang HF CASE REPORT 4878 Familial gastrointestinal stromal tumors with KIT germline mutation in a Chinese family: A case report Yuan W. Huang W. Ren L. Xu C. Luan LJ, Huang J. Xue AW, Fang Y. Gao XD, Shen KT, Lv JH, Hou YY 4886 Nonfunctional pancreatic neuroendocrine tumours misdiagnosed as autoimmune pancreatitis: A case report and review of literature Lin ZQ. Li X, Yang Y. Zhang XY, Zhang XX, Guo J 4895 Sudden deafness as a prodrome of cerebellar artery infarction: Three case reports Li BL, Xu JY, Lin S 4904 Importance of abdominal X-ray to confirm the position of levonorgestrel-releasing intrauterine system: A case report Maebayushi A. Kato K. Hayashi N. Nagaishi M. Kawana K 4911 Bedside ultrasonic localization of the nasogastric tube in a patient with severe COVID-19: A case report Zhu XJ. Liu SX. Li QT. Jiang YJ 4917 Paradoxical herniation after decompressive craniectomy provoked by mannitol: A case report Du C, Tang HJ, Fan SM 4923 Targeted next-generation sequencing identifies a novel nonsense mutation in ANK1 for hereditary spherocytosis: A case report Fu P. Jiao YY, Chen K, Shao JB, Liao XL, Yang JW, Jiang SY 4929 Nonfunctional bladder paraganglioma misdiagnosed as hemangioma: A case report Chen J, Yang HF 	4836	Validations of new cut-offs for surgical drains management and use of computerized tomography scan after pancreatoduodenectomy: The DALCUT trial	
 Observational Study Psychosocial adaptation and influencing factors among patients with chemotherapy-induced peripheral neuropathy Zhou X, Wang DY, Ding CY, Liu H, Sun ZQ META-ANALYSIS Outcome of the efficacy of Chinese herbal medicine for functional constipation: A systematic review and meta-analysis Lyu Z, Fan Y, Bai Y, Liu T, Zhong LL, Liang HF CASE REPORT 4878 Familial gastrointestinal stromal tumors with KIT germline mutation in a Chinese family: A case report Yuan W, Huang W, Ren L, Xu C, Luan LJ, Huang J, Xue AW, Fang Y, Gao XD, Shen KT, Lv JH, Hou YY 4886 Nonfunctional pancreatic neuroendocrine tumours misdiagnosed as autoimmune pancreatitis: A case report and review of literature Lin ZQ, Li X, Yang Y, Wang Y, Zhang XY, Zhang XX, Guo J 4895 Sudden deafness as a prodrome of cerebellar artery infarction: Three case reports I BI, Xu JY, Lin S 4904 Importance of abdominal X-ray to confirm the position of levonorgestrel-releasing intrauterine system: A case report Maebayashi A, Kato K, Hayashi N, Nagaishi M, Kawana K 4911 Bedside ultrasonic localization of the nasogastric tube in a patient with severe COVID-19: A case report Zhu XI, Liu SX, Li QT, Jang YJ 4917 Paradoxical herniation after decompressive craniectomy provoked by mannitol: A case report Du C, Tang HJ, Fan SM 4923 Targeted next-generation sequencing identifies a novel nonsense mutation in ANK1 for hereditary spherocytosis: A case report Fu P, Juao YP, Chen K, Shao JB, Liao XL, Yang JW, Jiang SY 4929 Nonfunctional bladder paraganglioma misdiagnosed as hemangioma: A case report Chen J, Yang HF 		Caputo D, Coppola A, La Vaccara V, Passa R, Carbone L, Ciccozzi M, Angeletti S, Coppola R	
 4843 Psychosocial adaptation and influencing factors among patients with chemotherapy-induced peripheral neuropathy Zhou X, Wang DY, Ding CY, Liu H, Sun ZQ META-ANALYSIS 4856 Outcome of the efficacy of Chinese herbal medicine for functional constipation: A systematic review and meta-analysis Lyu Z, Fan Y, Bai Y, Liu T, Zhong LL, Liang HF CASE REPORT 4878 Familial gastrointestinal stromal tumors with KIT germline mutation in a Chinese family: A case report Yuan W, Huang W, Ren L, Xu C, Luan LJ, Huang J, Xue AW, Fang Y, Gao XD, Shen KT, Lv JH, Hou YY 4886 Nonfunctional pancreatic neuroendocrine tumours misdiagnosed as autoimmune pancreatitis: A case report and review of literature Lin ZQ, Li X, Yang Y, Wang Y, Zhang XY, Zhang XX, Guo J 4895 Sudden deafness as a prodrome of cerebellar artery infarction: Three case reports Li BL, Xu JY, Lin S 4904 Importance of abdominal X-ray to confirm the position of levonorgestrel-releasing intrauterine system: A case report Zhu XJ, Liu SX, Li QT, Jiang YJ 4917 Paradoxical herniation after decompressive craniectomy provoked by mannitol: A case report Zhu XJ, Liu SX, Li QT, Jiang YJ 4923 Targeted next-generation sequencing identifies a novel nonsense mutation in ANK1 for hereditary spherocytosis: A case report <i>Fu P, Jiao</i> YT, Chen K, Shao JB, Liao XL, Yang JW, Jiang SY 4929 Nonfunctional bladder paraganglioma misdiagnosed as hemangioma: A case report Chen J, Yang HF 		Observational Study	
 Zhou X, Wang DY, Ding CY, Liu H. Sun ZQ META-ANALYSIS Outcome of the efficacy of Chinese herbal medicine for functional constipation: A systematic review and meta-analysis Lyu Z, Fan Y, Bai Y, Liu T, Zhong LL, Liang HF CASE REPORT 4878 Familial gastrointestinal stromal tumors with KIT germline mutation in a Chinese family: A case report Yuan W, Huang W, Ren L, Xu C, Luan LJ, Huang J, Xue AW, Fang Y, Gao XD, Shen KT, Lv JH, Hou YY 4886 Nonfunctional pancreatic neuroendocrine tumours misdiagnosed as autoimmune pancreatitis: A case report and review of literature Lin ZQ, Li X, Yang Y, Wang Y, Zhang XY, Zhang XX, Guo J 4895 Sudden deafness as a prodrome of cerebellar artery infarction: Three case reports Li BL, Xu JY, Lin S 4904 Importance of abdominal X-ray to confirm the position of levonorgestrel-releasing intrauterine system: A case report Maebayashi A, Kato K, Hayashi N, Nagaishi M, Kawana K 4911 Bedside ultrasonic localization of the nasogastric tube in a patient with severe COVID-19: A case report Zhu XJ, Liu SX, Li QT, Jiang YJ 4917 Paradoxical herniation after decompressive craniectomy provoked by mannitol: A case report Du C, Tang HJ, Fan SM 4923 Targeted next-generation sequencing identifies a novel nonsense mutation in ANK1 for hereditary spherocytosis: A case report Fu P, Juao YY, Chen K, Shao JB, Liao XL, Yang JW, Jiang SY 4929 Nonfunctional bladder paraganglioma misdiagnosed as hemangioma: A case report Chen J, Yang HF 	4843	Psychosocial adaptation and influencing factors among patients with chemotherapy-induced peripheral neuropathy	
 META-ANALYSIS Outcome of the efficacy of Chinese herbal medicine for functional constipation: A systematic review and meta-analysis Lyu Z, Fan Y, Bai Y, Liu T, Zhong LL, Liang HF CASE REPORT Familial gastrointestinal stromal tumors with KIT germline mutation in a Chinese family: A case report Yuan W, Huang W, Ren L, Xu C, Luan LJ, Huang J, Xue AW, Fang Y, Gao XD, Shen KT, Lv JH, Hou YY Nonfunctional pancreatic neuroendocrine tumours misdiagnosed as autoimmune pancreatitis: A case report and review of literature Lin ZQ, Li X, Yang Y, Wang Y, Zhang XY, Zhang XX, Guo J Sudden deafness as a prodrome of cerebellar artery infarction: Three case reports Li BL, Xu JY, Lin S Importance of abdominal X-ray to confirm the position of levonorgestrel-releasing intrauterine system: A case report Maebayashi A, Kato K, Hayashi N, Nagaishi M, Kawama K Bedside ultrasonic localization of the nasogastric tube in a patient with severe COVID-19: A case report Zhu XJ, Liu SX, Li QT, Jiang YJ Paradoxical herniation after decompressive craniectomy provoked by mannitol: A case report Du C, Tang HJ, Fan SM Targeted next-generation sequencing identifies a novel nonsense mutation in ANK1 for hereditary spherocytosis: A case report Fu P, Juao YY, Chen K, Shao JB, Liao XL, Yang JW, Jiang SY Nonfunctional bladder paraganglioma misdiagnosed as hemangioma: A case report Chen J, Yang HF 		Zhou X, Wang DY, Ding CY, Liu H, Sun ZQ	
 4856 Outcome of the efficacy of Chinese herbal medicine for functional constipation: A systematic review and meta-analysis <i>Lyu Z, Fan Y, Bai Y, Liu T, Zhong LL, Liang HF</i> CASE REPORT 4878 Familial gastrointestinal stromal tumors with <i>KIT</i> germline mutation in a Chinese family: A case report <i>Yuan W, Huang W, Ren L, Xu C, Luan LJ, Huang J, Xue AW, Fang Y, Gao XD, Shen KT, Lv JH, Hou YY</i> 4886 Nonfunctional pancreatic neuroendocrine tumours misdiagnosed as autoimmune pancreatitis: A case report and review of literature <i>Lin ZQ, Li X, Yang Y, Wang Y, Zhang XY, Zhang XX, Guo J</i> 4895 Sudden deafness as a prodrome of cerebellar artery infarction: Three case reports <i>Li BL, Xu JY, Lin S</i> 4904 Importance of abdominal X-ray to confirm the position of levonorgestrel-releasing intrauterine system: A case report <i>Maebayashi A, Kato K, Hayashi N, Nagaishi M, Kawana K</i> 4911 Bedside ultrasonic localization of the nasogastric tube in a patient with severe COVID-19: A case report <i>Zhu XJ, Liu SX, Li QT, Jiang YJ</i> 4917 Paradoxical herniation after decompressive craniectomy provoked by mannitol: A case report <i>Du C, Tang HJ, Fan SM</i> 4923 Targeted next-generation sequencing identifies a novel nonsense mutation in ANK1 for hereditary spherocytosis: A case report <i>Fu P, Jiao YY, Chen K, Shao JB, Liao XL, Yang JW, Jiang SY</i> 4929 Nonfunctional bladder paraganglioma misdiagnosed as hemangioma: A case report <i>Chen J, Yang IH</i> 		META-ANALYSIS	
 Lyu Z, Fan Y, Bai Y, Liu T, Zhong LL, Liang HF CASE REPORT Familial gastrointestinal stromal tumors with KIT germline mutation in a Chinese family: A case report Yuan W, Huang W, Ren L, Xu C, Luan LJ, Huang J, Xue AW, Fang Y, Gao XD, Shen KT, Lv JH, Hou YY 4886 Nonfunctional pancreatic neuroendocrine tumours misdiagnosed as autoimmune pancreatitis: A case report and review of literature Lin ZQ, Li X, Yang Y, Wang Y, Zhang XY, Zhang XX, Guo J 4895 Sudden deafness as a prodrome of cerebellar artery infarction: Three case reports Li BL, Xu JY, Lin S 4904 Importance of abdominal X-ray to confirm the position of levonorgestrel-releasing intrauterine system: A case report Maebayashi A, Kato K, Hayashi N, Nagaishi M, Kawana K 4911 Bedside ultrasonic localization of the nasogastric tube in a patient with severe COVID-19: A case report Zhu XJ, Liu SX, Li QT, Jiang YJ 4917 Paradoxical herniation after decompressive craniectomy provoked by mannitol: A case report Du C, Tang HJ, Fan SM 4923 Targeted next-generation sequencing identifies a novel nonsense mutation in ANK1 for hereditary spherocytosis: A case report Fu P, Jiao YY, Chen K, Shao JB, Liao XL, Yang JW, Jiang SY 4929 Nonfunctional bladder paraganglioma misdiagnosed as hemangioma: A case report Chen J, Yang HF 	4856	Outcome of the efficacy of Chinese herbal medicine for functional constipation: A systematic review and meta-analysis	
 CASE REPORT 4878 Familial gastrointestinal stromal tumors with <i>KIT</i> germline mutation in a Chinese family: A case report <i>Yuan W, Huang W, Ren L, Xu C, Luan LJ, Huang J, Xue AW, Fang Y, Gao XD, Shen KT, Lv JH, Hou YY</i> 4886 Nonfunctional pancreatic neuroendocrine tumours misdiagnosed as autoimmune pancreatitis: A case report and review of literature <i>Lin ZQ, Li X, Yang Y, Wang Y, Zhang XY, Zhang XX, Guo J</i> 4895 Sudden deafness as a prodrome of cerebellar artery infarction: Three case reports <i>Li BL, Xu JY, Lin S</i> 4904 Importance of abdominal X-ray to confirm the position of levonorgestrel-releasing intrauterine system: A case report <i>Maebayashi A, Kato K, Hayashi N, Nagaishi M, Kawana K</i> 4911 Bedside ultrasonic localization of the nasogastric tube in a patient with severe COVID-19: A case report <i>Zhu XJ, Liu SX, Li QT, Jiang YJ</i> 4917 Paradoxical herniation after decompressive craniectomy provoked by mannitol: A case report <i>Du C, Tang HJ, Fan SM</i> 4923 Targeted next-generation sequencing identifies a novel nonsense mutation in ANK1 for hereditary spherocytosis: A case report <i>Fu P, Jiao YY, Chen K, Shao JB, Liao XL, Yang JW, Jiang SY</i> 4929 Nonfunctional bladder paraganglioma misdiagnosed as hemangioma: A case report <i>Chen J, Yang HF</i> 		Lyu Z, Fan Y, Bai Y, Liu T, Zhong LL, Liang HF	
 4878 Familial gastrointestinal stromal tumors with KIT germline mutation in a Chinese family: A case report <i>Yuan W, Huang W, Ren L, Xu C, Luan LJ, Huang J, Xue AW, Fang Y, Gao XD, Shen KT, Lv JH, Hou YY</i> 4886 Nonfunctional pancreatic neuroendocrine tumours misdiagnosed as autoimmune pancreatitis: A case report and review of literature <i>Lin ZQ, Li X, Yang Y, Wang Y, Zhang XY, Zhang XX, Guo J</i> 4895 Sudden deafness as a prodrome of cerebellar artery infarction: Three case reports <i>Li BL, Xu JY, Lin S</i> 4904 Importance of abdominal X-ray to confirm the position of levonorgestrel-releasing intrauterine system: A case report <i>Maebayashi A, Kato K, Hayashi N, Nagaishi M, Kawana K</i> 4911 Bedside ultrasonic localization of the nasogastric tube in a patient with severe COVID-19: A case report <i>Zhu XI, Liu SX, Li QT, Jiang YJ</i> 4917 Paradoxical herniation after decompressive craniectomy provoked by mannitol: A case report <i>Du C, Tang HJ, Fan SM</i> 4923 Targeted next-generation sequencing identifies a novel nonsense mutation in ANK1 for hereditary spherocytosis: A case report <i>Fu P, Jiao YY, Chen K, Shao JB, Liao XL, Yang JW, Jiang SY</i> 4929 Nonfunctional bladder paraganglioma misdiagnosed as hemangioma: A case report <i>Chen J, Yang HF</i> 		CASE REPORT	
 Yuan W, Huang W, Ren L, Xu C, Luan LJ, Huang J, Xue AW, Fang Y, Gao XD, Shen KT, Lv JH, Hou YY 14886 Nonfunctional pancreatic neuroendocrine tumours misdiagnosed as autoimmune pancreatitis: A case report and review of literature Lin ZQ, Li X, Yang Y, Wang Y, Zhang XY, Zhang XX, Guo J 14895 Sudden deafness as a prodrome of cerebellar artery infarction: Three case reports Li BL, Xu JY, Lin S 14904 Importance of abdominal X-ray to confirm the position of levonorgestrel-releasing intrauterine system: A case report Maebayashi A, Kato K, Hayashi N, Nagaishi M, Kawana K 14911 Bedside ultrasonic localization of the nasogastric tube in a patient with severe COVID-19: A case report Zhu XJ, Liu SX, Li QT, Jiang YJ 14917 Paradoxical herniation after decompressive craniectomy provoked by mannitol: A case report Du C, Tang HJ, Fan SM 14923 Targeted next-generation sequencing identifies a novel nonsense mutation in ANK1 for hereditary spherocytosis: A case report Fu P, Jiao YY, Chen K, Shao JB, Liao XL, Yang JW, Jiang SY 14929 Nonfunctional bladder paraganglioma misdiagnosed as hemangioma: A case report Chen J, Yang HF 	4878	Familial gastrointestinal stromal tumors with KIT germline mutation in a Chinese family: A case report	
 4886 Nonfunctional pancreatic neuroendocrine tumours misdiagnosed as autoimmune pancreatitis: A case report and review of literature Lin ZQ, Li X, Yang Y, Wang Y, Zhang XY, Zhang XX, Guo J 4895 Sudden deafness as a prodrome of cerebellar artery infarction: Three case reports Li BL, Xu JY, Lin S 4904 Importance of abdominal X-ray to confirm the position of levonorgestrel-releasing intrauterine system: A case report Maebayashi A, Kato K, Hayashi N, Nagaishi M, Kawana K 4911 Bedside ultrasonic localization of the nasogastric tube in a patient with severe COVID-19: A case report Zhu XJ, Liu SX, Li QT, Jiang YJ 4917 Paradoxical herniation after decompressive craniectomy provoked by mannitol: A case report Du C, Tang HJ, Fan SM 4923 Targeted next-generation sequencing identifies a novel nonsense mutation in ANK1 for hereditary spherocytosis: A case report Fu P, Jiao YY, Chen K, Shao JB, Liao XL, Yang JW, Jiang SY 4929 Nonfunctional bladder paraganglioma misdiagnosed as hemangioma: A case report Chen J, Yang HF 		Yuan W, Huang W, Ren L, Xu C, Luan LJ, Huang J, Xue AW, Fang Y, Gao XD, Shen KT, Lv JH, Hou YY	
 Lin ZQ, Li X, Yang Y, Wang Y, Zhang XY, Zhang XX, Guo J 4895 Sudden deafness as a prodrome of cerebellar artery infarction: Three case reports Li BL, Xu JY, Lin S 4904 Importance of abdominal X-ray to confirm the position of levonorgestrel-releasing intrauterine system: A case report Maebayashi A, Kato K, Hayashi N, Nagaishi M, Kawana K 4911 Bedside ultrasonic localization of the nasogastric tube in a patient with severe COVID-19: A case report Zhu XJ, Liu SX, Li QT, Jiang YJ 4917 Paradoxical herniation after decompressive craniectomy provoked by mannitol: A case report Du C, Tang HJ, Fan SM 4923 Targeted next-generation sequencing identifies a novel nonsense mutation in ANK1 for hereditary spherocytosis: A case report Fu P, Jiao YY, Chen K, Shao JB, Liao XL, Yang JW, Jiang SY 4929 Nonfunctional bladder paraganglioma misdiagnosed as hemangioma: A case report Chen J, Yang HF 	4886	Nonfunctional pancreatic neuroendocrine tumours misdiagnosed as autoimmune pancreatitis: A case report and review of literature	
 4895 Sudden deafness as a prodrome of cerebellar artery infarction: Three case reports <i>Li BL, Xu JY, Lin S</i> 4904 Importance of abdominal X-ray to confirm the position of levonorgestrel-releasing intrauterine system: A case report <i>Maebayashi A, Kato K, Hayashi N, Nagaishi M, Kawana K</i> 4911 Bedside ultrasonic localization of the nasogastric tube in a patient with severe COVID-19: A case report <i>Zhu XJ, Liu SX, Li QT, Jiang YJ</i> 4917 Paradoxical herniation after decompressive craniectomy provoked by mannitol: A case report <i>Du C, Tang HJ, Fan SM</i> 4923 Targeted next-generation sequencing identifies a novel nonsense mutation in ANK1 for hereditary spherocytosis: A case report <i>Fu P, Jiao YY, Chen K, Shao JB, Liao XL, Yang JW, Jiang SY</i> 4929 Nonfunctional bladder paraganglioma misdiagnosed as hemangioma: A case report <i>Chen J, Yang HF</i> 		Lin ZQ, Li X, Yang Y, Wang Y, Zhang XY, Zhang XX, Guo J	
 Li BL, Xu JY, Lin S 4904 Importance of abdominal X-ray to confirm the position of levonorgestrel-releasing intrauterine system: A case report <i>Maebayashi A, Kato K, Hayashi N, Nagaishi M, Kawana K</i> 4911 Bedside ultrasonic localization of the nasogastric tube in a patient with severe COVID-19: A case report <i>Zhu XJ, Liu SX, Li QT, Jiang YJ</i> 4917 Paradoxical herniation after decompressive craniectomy provoked by mannitol: A case report <i>Du C, Tang HJ, Fan SM</i> 4923 Targeted next-generation sequencing identifies a novel nonsense mutation in ANK1 for hereditary spherocytosis: A case report <i>Fu P, Jiao YY, Chen K, Shao JB, Liao XL, Yang JW, Jiang SY</i> 4929 Nonfunctional bladder paraganglioma misdiagnosed as hemangioma: A case report <i>Chen J, Yang HF</i> 	4895	Sudden deafness as a prodrome of cerebellar artery infarction: Three case reports	
 4904 Importance of abdominal X-ray to confirm the position of levonorgestrel-releasing intrauterine system: A case report <i>Maebayashi A, Kato K, Hayashi N, Nagaishi M, Kawana K</i> 4911 Bedside ultrasonic localization of the nasogastric tube in a patient with severe COVID-19: A case report <i>Zhu XJ, Liu SX, Li QT, Jiang YJ</i> 4917 Paradoxical herniation after decompressive craniectomy provoked by mannitol: A case report <i>Du C, Tang HJ, Fan SM</i> 4923 Targeted next-generation sequencing identifies a novel nonsense mutation in ANK1 for hereditary spherocytosis: A case report <i>Fu P, Jiao YY, Chen K, Shao JB, Liao XL, Yang JW, Jiang SY</i> 4929 Nonfunctional bladder paraganglioma misdiagnosed as hemangioma: A case report <i>Chen J, Yang HF</i> 		Li BL, Xu JY, Lin S	
 Maebayashi A, Kato K, Hayashi N, Nagaishi M, Kawana K 4911 Bedside ultrasonic localization of the nasogastric tube in a patient with severe COVID-19: A case report <i>Zhu XJ, Liu SX, Li QT, Jiang YJ</i> 4917 Paradoxical herniation after decompressive craniectomy provoked by mannitol: A case report <i>Du C, Tang HJ, Fan SM</i> 4923 Targeted next-generation sequencing identifies a novel nonsense mutation in ANK1 for hereditary spherocytosis: A case report <i>Fu P, Jiao YY, Chen K, Shao JB, Liao XL, Yang JW, Jiang SY</i> 4929 Nonfunctional bladder paraganglioma misdiagnosed as hemangioma: A case report <i>Chen J, Yang HF</i> 	4904	Importance of abdominal X-ray to confirm the position of levonorgestrel-releasing intrauterine system: A case report	
 4911 Bedside ultrasonic localization of the nasogastric tube in a patient with severe COVID-19: A case report <i>Zhu XJ, Liu SX, Li QT, Jiang YJ</i> 4917 Paradoxical herniation after decompressive craniectomy provoked by mannitol: A case report <i>Du C, Tang HJ, Fan SM</i> 4923 Targeted next-generation sequencing identifies a novel nonsense mutation in ANK1 for hereditary spherocytosis: A case report <i>Fu P, Jiao YY, Chen K, Shao JB, Liao XL, Yang JW, Jiang SY</i> 4929 Nonfunctional bladder paraganglioma misdiagnosed as hemangioma: A case report <i>Chen J, Yang HF</i> 		Maebayashi A, Kato K, Hayashi N, Nagaishi M, Kawana K	
 4917 Paradoxical herniation after decompressive craniectomy provoked by mannitol: A case report <i>Du C, Tang HJ, Fan SM</i> 4923 Targeted next-generation sequencing identifies a novel nonsense mutation in ANK1 for hereditary spherocytosis: A case report <i>Fu P, Jiao YY, Chen K, Shao JB, Liao XL, Yang JW, Jiang SY</i> 4929 Nonfunctional bladder paraganglioma misdiagnosed as hemangioma: A case report <i>Chen J, Yang HF</i> 	4911	Bedside ultrasonic localization of the nasogastric tube in a patient with severe COVID-19: A case report	
 4917 Paradoxical herniation after decompressive craniectomy provoked by mannitol: A case report <i>Du C, Tang HJ, Fan SM</i> 4923 Targeted next-generation sequencing identifies a novel nonsense mutation in ANK1 for hereditary spherocytosis: A case report <i>Fu P, Jiao YY, Chen K, Shao JB, Liao XL, Yang JW, Jiang SY</i> 4929 Nonfunctional bladder paraganglioma misdiagnosed as hemangioma: A case report <i>Chen J, Yang HF</i> 		Znu XJ, Liu SX, Li QI, Jiang IJ	
 4923 Targeted next-generation sequencing identifies a novel nonsense mutation in ANK1 for hereditary spherocytosis: A case report <i>Fu P, Jiao YY, Chen K, Shao JB, Liao XL, Yang JW, Jiang SY</i> 4929 Nonfunctional bladder paraganglioma misdiagnosed as hemangioma: A case report <i>Chen J, Yang HF</i> 	4917	Paradoxical herniation after decompressive craniectomy provoked by mannitol: A case report Du C, Tang HJ, Fan SM	
 <i>Fu P, Jiao YY, Chen K, Shao JB, Liao XL, Yang JW, Jiang SY</i> 4929 Nonfunctional bladder paraganglioma misdiagnosed as hemangioma: A case report <i>Chen J, Yang HF</i> 	4923	Targeted next-generation sequencing identifies a novel nonsense mutation in ANK1 for hereditary	
4929 Nonfunctional bladder paraganglioma misdiagnosed as hemangioma: A case report <i>Chen J, Yang HF</i>		Fu P, Jiao YY, Chen K, Shao JB, Liao XL, Yang JW, Jiang SY	
Chen J, Yang HF	4929	Nonfunctional bladder paraganglioma misdiagnosed as hemangioma: A case report	
		Chen J, Yang HF	



Conton	World Journal of Clinical Case	
Conten	Thrice Monthly Volume 10 Number 15 May 26, 2022	
4935	Special type of Wernekink syndrome in midbrain infarction: Four case reports <i>Yang YZ, Hu WX, Zhai HJ</i>	
4942	Primary extraskeletal Ewing's sarcoma of the lumbar nerve root: A case report <i>Lei LH, Li F, Wu T</i>	
4949	Yellow nail syndrome accompanied by minimal-change nephrotic syndrome: A case report	
	Zhang YN, Wang MH, Yu WC, Cheng W, Cong JP, Huang XP, Wang FF	
4957	Total femur replacement with 18 years of follow-up: A case report	
	Yang YH, Chen JX, Chen QY, Wang Y, Zhou YB, Wang HW, Yuan T, Sun HP, Xie L, Yao ZH, Yang ZZ	
4964	Male metaplastic breast cancer with poor prognosis: A case report	
	Kim HY, Lee S, Kim DI, Jung CS, Kim JY, Nam KJ, Choo KS, Jung YJ	
4971	CD8-positive indolent T-Cell lymphoproliferative disorder of the gastrointestinal tract: A case report and review of literature	
	Weng CY, Ye C, Fan YH, Lv B, Zhang CL, Li M	
4985	Bone flare after initiation of novel hormonal therapy in patients with metastatic hormone-sensitive prostate cancer: A case report	
	Li KH, Du YC, Yang DY, Yu XY, Zhang XP, Li YX, Qiao L	
4991	Postoperative infection of the skull base surgical site due to suppurative parotitis: A case report	
	Zhao Y, Zhao Y, Zhang LQ, Feng GD	
4998	Blunt aortic injury-traumatic aortic isthmus pseudoaneurysm with right iliac artery dissection aneurysm: A case report	
	Fang XX, Wu XH, Chen XF	
5005	Extensive complex thoracoabdominal aortic aneurysm salvaged by surgical graft providing landing zone for endovascular graft: A case report	
	Jang AY, Oh PC, Kang JM, Park CH, Kang WC	
5012	Gastric heterotopia of colon found cancer workup in liver abscess: A case report	
	Park JG, Suh JI, Kim YU	
5018	Clinical manifestations and gene analysis of Hutchinson-Gilford progeria syndrome: A case report	
	Zhang SL, Lin SZ, Zhou YQ, Wang WQ, Li JY, Wang C, Pang QM	
5025	Neurocutaneous melanosis with an intracranial cystic-solid meningeal melanoma in an adult: A case report and review of literature	
	Liu BC, Wang YB, Liu Z, Jiao Y, Zhang XF	
5036	Metastasis of liver cancer to the thyroid after surgery: A case report	
	Zhong HC, Sun ZW, Cao GH, Zhao W, Ma K, Zhang BY, Feng YJ	



•	World Journal of Clinical Cases Contents Thrice Monthly Volume 10 Number 15 May 26, 2022	
Conten		
5042	Spontaneous liver rupture following SARS-CoV-2 infection in late pregnancy: A case report	
	Ambrož R, Stašek M, Molnár J, Špička P, Klos D, Hambálek J, Skanderová D	
5051	Carotid blowout syndrome caused by chronic infection: A case report	
	Xie TH, Zhao WJ, Li XL, Hou Y, Wang X, Zhang J, An XH, Liu LT	
5057	Is repeat wide excision plus radiotherapy of localized rectal melanoma another choice before abdominoperineal resection? A case report	
	Chiu HT, Pu TW, Yen H, Liu T, Wen CC	
5064	Metaplastic breast cancer with chondrosarcomatous differentiation combined with concurrent bilateral breast cancer: A case report	
	Yang SY, Li Y, Nie JY, Yang ST, Yang XJ, Wang MH, Zhang J	
5072	Rare solitary splenic metastasis from a thymic carcinoma detected on fluorodeoxyglucose-positron emission tomography: A case report	
	Tsai YH, Lin KH, Huang TW	
5077	Type A aortic dissection following heart transplantation: A case report	
	Zeng Z, Yang LJ, Zhang C, Xu F	
5082	Catheter-related infections caused by <i>Mycobacterium abscessus</i> in a patient with motor neurone disease: A case report	
	Pan SF, Zhang YY, Wang XZ, Sun JJ, Song SL, Tang YR, Wang JL	
5088	Clear aligner treatment for a four-year-old patient with anterior cross-bite and facial asymmetry: A case report	
	Zou YR, Gan ZQ, Zhao LX	
5097	Knot impingement after arthroscopic rotator cuff repair mimicking infection: A case report	
	Kim DH, Jeon JH, Choi BC, Cho CH	
5103	Solitary primary pulmonary synovial sarcoma: A case report	
	He WW, Huang ZX, Wang WJ, Li YL, Xia QY, Qiu YB, Shi Y, Sun HM	
5111	Anesthetic management for intraoperative acute pulmonary embolism during inferior vena cava tumor thrombus surgery: A case report	
	Hsu PY, Wu EB	
5119	Delayed diagnosis of arytenoid cartilage dislocation after tracheal intubation in the intensive care unit: A case report	
	Yan WQ, Li C, Chen Z	



Contents

Thrice Monthly Volume 10 Number 15 May 26, 2022

ABOUT COVER

Editorial Board Member of World Journal of Clinical Cases, Jing Yang, MD, Associate Professor, Department of the First General Surgery, Gansu Provincial Hospital, Lanzhou 730000, Gansu Province, China. 21634604@qq.com

AIMS AND SCOPE

The primary aim of World Journal of Clinical Cases (WJCC, World J Clin Cases) is to provide scholars and readers from various fields of clinical medicine with a platform to publish high-quality clinical research articles and communicate their research findings online.

WJCC mainly publishes articles reporting research results and findings obtained in the field of clinical medicine and covering a wide range of topics, including case control studies, retrospective cohort studies, retrospective studies, clinical trials studies, observational studies, prospective studies, randomized controlled trials, randomized clinical trials, systematic reviews, meta-analysis, and case reports.

INDEXING/ABSTRACTING

The WJCC is now indexed in Science Citation Index Expanded (also known as SciSearch®), Journal Citation Reports/Science Edition, Scopus, PubMed, and PubMed Central. The 2021 Edition of Journal Citation Reports® cites the 2020 impact factor (IF) for WJCC as 1.337; IF without journal self cites: 1.301; 5-year IF: 1.742; Journal Citation Indicator: 0.33; Ranking: 119 among 169 journals in medicine, general and internal; and Quartile category: Q3. The WJCC's CiteScore for 2020 is 0.8 and Scopus CiteScore rank 2020: General Medicine is 493/793.

RESPONSIBLE EDITORS FOR THIS ISSUE

Production Editor: Ying-Yi Yuan, Production Department Director: Xiang Li, Editorial Office Director: Jin-Lei Wang.

NAME OF JOURNAL World Journal of Clinical Cases	INSTRUCTIONS TO AUTHORS https://www.wjgnet.com/bpg/gerinfo/204
ISSN	GUIDELINES FOR ETHICS DOCUMENTS
ISSN 2307-8960 (online)	https://www.wjgnet.com/bpg/GerInfo/287
LAUNCH DATE	GUIDELINES FOR NON-NATIVE SPEAKERS OF ENGLISH
April 16, 2013	https://www.wjgnet.com/bpg/gerinfo/240
FREQUENCY	PUBLICATION ETHICS
Thrice Monthly	https://www.wjgnet.com/bpg/GerInfo/288
EDITORS-IN-CHIEF	PUBLICATION MISCONDUCT
Bao-Gan Peng, Jerzy Tadeusz Chudek, George Kontogeorgos, Maurizio Serati, Ja Hyeon Ku	https://www.wjgnet.com/bpg/gerinfo/208
EDITORIAL BOARD MEMBERS	ARTICLE PROCESSING CHARGE
https://www.wjgnet.com/2307-8960/editorialboard.htm	https://www.wignet.com/bpg/gerinfo/242
PUBLICATION DATE	STEPS FOR SUBMITTING MANUSCRIPTS
May 26, 2022	https://www.wignet.com/bpg/GerInfo/239
COPYRIGHT	ONLINE SUBMISSION
© 2022 Baishideng Publishing Group Inc	https://www.f6publishing.com

© 2022 Baishideng Publishing Group Inc. All rights reserved. 7041 Koll Center Parkway, Suite 160, Pleasanton, CA 94566, USA E-mail: bpgoffice@wjgnet.com https://www.wjgnet.com



W J C C World Journal of Clinical Cases

Submit a Manuscript: https://www.f6publishing.com

World J Clin Cases 2022 May 26; 10(15): 5082-5087

DOI: 10.12998/wjcc.v10.i15.5082

ISSN 2307-8960 (online)

CASE REPORT

Catheter-related infections caused by Mycobacterium abscessus in a patient with motor neurone disease: A case report

Su-Fei Pan, Yuan-Yuan Zhang, Xiao-Zhen Wang, Jing-Jing Sun, Shao-Ling Song, Yu-Rong Tang, Ji-Liang Wang

Specialty type: Medicine, research and experimental

Provenance and peer review:

Unsolicited article; Externally peer reviewed.

Peer-review model: Single blind

Peer-review report's scientific quality classification

Grade A (Excellent): 0 Grade B (Very good): 0 Grade C (Good): C, C Grade D (Fair): 0 Grade E (Poor): 0

P-Reviewer: Karavaş E, Turkey; Vagholkar K, India

Received: December 16, 2021 Peer-review started: December 16, 2021 First decision: February 14, 2022 Revised: February 23, 2022 Accepted: March 26, 2022 Article in press: March 26, 2022 Published online: May 26, 2022



Su-Fei Pan, Yuan-Yuan Zhang, Xiao-Zhen Wang, Jing-Jing Sun, Shao-Ling Song, Yu-Rong Tang, Ji-Liang Wang, Department of Laboratory Medicine, Shengli Oilfield Central Hospital, Dongying 257034, Shandong Province, China

Corresponding author: Ji-Liang Wang, MS, Chief Doctor, Department of Laboratory Medicine, Shengli Oilfield Central Hospital, No. 31 Jinan Road, Dongying District, Dongying 257034, Shandong Province, China. zxyywjl@163.com

Abstract

BACKGROUND

Mycobacterium abscessus (M. abscessus) is a rapidly growing mycobacterium and ubiquitous in the environment, which infrequently causes disease in humans. However, it can cause cutaneous or respiratory infections among immunocompromised hosts. Due to the resistance to most antibiotics, the pathogen is formidable and difficult-to-treat.

CASE SUMMARY

Here, we present a case of catheter-related M. abscessus infections in a patient with motor neurone disease. Catheter and peripheral blood cultures of the patient showed positive results during Gram staining and acid-fast staining. The alarm time of catheter blood culture was 10.6 h earlier than that of peripheral blood. After removal of the peripherally inserted central catheter, secretion and catheter blood culture were positive. M. abscessus was identified by matrix-assisted laser desorption ionization-time of flight mass spectrometry and 16S rDNA sequencing.

CONCLUSION

For catheter-related *M. abscessus* infection, rapid diagnosis and timely and adequate antimicrobial therapy are crucial.

Key Words: Catheter-related infections; Diagnosis; Motor neurone disease; Mycobacterium abscessus; Case report

©The Author(s) 2022. Published by Baishideng Publishing Group Inc. All rights reserved.



WJCC | https://www.wjgnet.com

Core Tip: Mycobacterium abscessus (M. abscessus) is a rapidly growing mycobacterium and ubiquitous in the environment, which infrequently causes disease in humans. However, it can cause cutaneous or respiratory infections among immunocompromised hosts. Due to the resistance to most antibiotics, the pathogen is formidable and difficult-to-treat. Here, we present a case of catheter-related M. abscessus infections in a patient with motor neurone disease. M. abscessus was identified by matrix-assisted laser desorption ionization-time of flight mass spectrometry and 16S rDNA sequencing. For catheter-related M. abscessus infection, rapid diagnosis and timely and adequate antimicrobial therapy are crucial.

Citation: Pan SF, Zhang YY, Wang XZ, Sun JJ, Song SL, Tang YR, Wang JL. Catheter-related infections caused by Mycobacterium abscessus in a patient with motor neurone disease: A case report. World J Clin Cases 2022; 10(15): 5082-5087

URL: https://www.wjgnet.com/2307-8960/full/v10/i15/5082.htm DOI: https://dx.doi.org/10.12998/wjcc.v10.i15.5082

INTRODUCTION

Mycobacterium abscessus (M. abscessus) is a rapidly growing non-tuberculous mycobacterium and is ubiquitous in the environment^[1]. Recent gene sequence analysis has shown that *M. abscessus* can be divided into three different subspecies (M. abscessus subsp. bolletii, M. abscessus subsp. abscessus, and M. abscessus subsp. massiliense)[2]. M. abscessus can cause a variety of clinical manifestations including cutaneous infections, catheter-related infections, post-surgical soft tissue infections, and respiratory diseases[3]. Besides, the incidence of pulmonary non-tuberculous mycobacteria infection has been increasing[4]. Of all the rapidly growing mycobacteria, M. abscessus is the most common cause of pulmonary infections. M. abscessus is also one of the mycobacteria that are most often isolated from patients with cystic fibrosis [5]. However, M. abscessus is resistant to most antibiotics in vitro, and thus is a formidable and difficult-to-treat pathogen[6]. At present, little is known regarding the diagnosis and management of catheter-related *M. abscessus* infections due to only a limited number of cases that have been reported [7,8]. Here, we present a case of catheter-related *M. abscessus* infections in a patient with motor neurone disease.

CASE PRESENTATION

Chief complaints

On February 6, 2019, a 62-year-old Chinese man presented with mild skin edema at the site of the peripherally inserted central venous catheter (PICC, median cubital vein) which had been inserted for 30 d, without skin redness and inflammatory exudation.

History of present illness

He presented with a two-day history of dyspnea and was admitted to our emergency intensive care unit with a diagnosis of motor neurone disease on January 7, 2019. The patient received comprehensive symptomatic treatment including invasive ventilator-assisted ventilation, pulse oxygen saturation measurement, expectorant, and nutritional supplement.

History of past illness

There was no history of past illness.

Personal and family history

There was no personal and family history.

Physical examination

Physical examination revealed that he was stuporous with a Glasgow coma scale of E1VTM1. His body temperature was 35.0 °C, heart rate 66 beats per minute, blood pressure 90/54 mmHg, and respiratory rate 23 breaths per minute.

Laboratory examinations

Routine blood tests revealed 3.7×10^9 cells/L white blood cells (reference range, $4.0-10.0 \times 10^9$ cells/L) and 67.2% neutrophils (reference range, 40%-75%). Catheter and peripheral blood cultures were performed on February 10, 2019. On February 11, 2019, he presented with elevated body temperature



(37.1 °C), white blood cells (10.2 × 10° cells/L), and neutrophils (86.7%). The serum procalcitonin and Creactive protein levels was 0.99 ng/mL (reference range, 0-0.05 ng/mL) and 184.9 mg/L (reference range, 0-5 mg/L), respectively. The patient began to receive anti-infective treatment with vancomycin. On February 19, 2019, the blood culture showed positive results during Gram staining (Figure 1A) and acid-fast staining (Figure 1B). The alarm time of catheter blood culture was 10.6 h earlier than that of peripheral blood culture. The treatment regimen of the patient was changed to combination therapy with vancomycin and amikacin.

On February 23, 2019, repeat blood cultures showed positive acid-fast bacilli, and the treatment regimen was adjusted to amikacin plus clarithromycin. On the second day, his body temperature was 35.3 °C, his heart rate was 74 beats per minute, white blood cells 7.4 × 10° cells/L, and neutrophils 77.6%. After removal of the PICC on March 11, 2019, secretion culture and catheter blood culture were all positive. The blood culture isolate was identified as M. abscessus by matrix-assisted laser desorption ionization-time of flight mass spectrometry (MALDI-TOF MS) (Figure 2A) and 16S rDNA sequencing (Figure 2B).

FINAL DIAGNOSIS

The patient was finally diagnosed with catheter-related infections caused by M. abscessus.

TREATMENT

He continued to receive anti-infective treatment with amikacin plus clarithromycin.

OUTCOME AND FOLLOW-UP

His body temperature was maintained at a basic level (35-36.3 °C). Unfortunately, the patient gave up treatment due to an unsatisfactory response to respiratory failure and shock and was discharged on April 13, 2019.

DISCUSSION

M. abscessus was a terrible and difficult-to-treat mycobacterial pathogen, which is resistant to most antibiotics in vitro[9]. It was ubiquitous in the environment including soil, water, and dust, and survived extreme temperatures and nutritional deprivation[10]. It can cause soft tissue and skin infections after surgical procedures or trauma, pulmonary infections, and disseminated diseases among immunocompromised hosts[11]. Infections in immunocompetent patients tend to be more localized, and usually due to contamination of wounds or abrasions with soil, water, dust, or other materials[12]. While, infections in immunosuppressed patients are often deeper and more diffuse, involving subcutaneous tissue, and leading to the formation of an abscess. Catheter-related infections often occurred in the setting of central venous access devices [13]. In the present study, we present a case of catheter-related *M. abscessus* infections in a patient with motor neurone disease.

Catheter-related bloodstream infection (CRBSI) is the most common complication associated with the use of intravascular catheters[14]. Our patient was a 62-year-old man with motor neurone disease. He had been treated in our hospital many times due to respiratory failure, shock, and electrolyte disorder. During the hospitalization, the patient used PICC for blood controls, which was high-risk factor for CRBSI. No other obvious source of bloodstream infection was found, except for PICC. He presented with fever and mild skin edema at the site of PICC. Routine blood tests revealed elevated white blood cells and neutrophils, procalcitonin, and C-reactive protein. Catheter and peripheral blood cultures of the patient showed positive results during Gram staining and acid-fast staining. The alarm time of catheter blood culture was 10.6 h earlier than that of peripheral blood. He was diagnosed with catheterrelated infections. Gram positive cocci (such as staphylococcus epidermidis, staphylococcus aureus, and enterococcus) have been historically the leading cause of CRBSI[15]. Catheter-related M. abscessus infection is relatively rare, with limited literature reports [7,8]. In the present study, M. abscessus was identified by matrix-assisted laser desorption ionization-time of flight mass spectrometry and 16S rDNA sequencing. The patient was finally diagnosed with catheter-related infections caused by *M. abscessus*.

The main threat of *M. abscessus* is its antibiotic resistance. *M. abscessus* may be the most resistant species among pathogenic rapidly growing mycobacteria, and its antimicrobial therapy is still a challenge[8]. A previous study showed that the treatment strategy of *M. abscessus* infections was the combination of multiple antibiotics, including amikacin, ofloxacin, ciprofloxacin, clarithromycin, and doxycycline[16]. In vitro studies showed that clarithromycin was the most effective of these antibiotics



WJCC | https://www.wjgnet.com



DOI: 10.12998/wjcc.v10.i15.5082 Copyright ©The Author(s) 2022.

Figure 1 Blood culture findings of the patient. A: Gram staining of the strain isolated from catheter blood culture; B: Acid-fast staining of the strain isolated from catheter blood culture.



Figure 2 Identification of Mycobacterium abscessus. A: Mass spectrometry identification results of Mycobacterium abscessus (M. abscessus); B: Gel electrophoresis of the 16S rDNA. The nucleotide sequences were analyzed with the National Center for Biotechnology Information BLAST. The almost full-length 16S rDNA gene sequence of the blood culture isolate shared 100% identity with that of M. abscessus subsp. massiliense.

> [17]. In the present study, the patient received anti-infective treatment with amikacin plus clarithromycin. In addition, in the case of catheter-related *M. abscessus* infections, removal of the catheter is necessary due to the high incidence of relapsing or uncontrolled bacteremia[8]. After the removal of the PICC of our patient, he continued to receive anti-infective treatment with amikacin plus clarithromycin, and his body temperature was maintained at a basic level (35-36.3 °C). Unfortunately, the patient gave up treatment due to an unsatisfactory response to respiratory failure and shock, so the long-term treatment results were not obtained.

CONCLUSION

In conclusion, we reported a case of catheter-related *M. abscessus* infections in a patient with motor neurone disease. For catheter-related M. abscessus infection, rapid diagnosis, and timely and adequate antimicrobial therapy are crucial.

FOOTNOTES

Author contributions: Pan SF, Zhang YY, and Wang JL designed the research and wrote the paper; Pan SF, Zhang YY,



WJCC | https://www.wjgnet.com

Wang XZ, Sun JJ, Song SL, and Tang YR collected all the data related to the case report; Wang JL supervised the report; all authors have read and approved the final manuscript.

Informed consent statement: Written informed consent was obtained from the patient.

Conflict-of-interest statement: The authors declare that they have no conflict of interest.

CARE Checklist (2016) statement: The authors have read the CARE Checklist (2016), and the manuscript was prepared and revised according to the CARE Checklist (2016).

Open-Access: This article is an open-access article that was selected by an in-house editor and fully peer-reviewed by external reviewers. It is distributed in accordance with the Creative Commons Attribution NonCommercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited and the use is noncommercial. See: https://creativecommons.org/Licenses/by-nc/4.0/

Country/Territory of origin: China

ORCID number: Su-Fei Pan 0000-0003-3898-3607; Yuan-Yuan Zhang 0000-0002-6002-6056; Xiao-Zhen Wang 0000-0001-6442-2454; Jing-Jing Sun 0000-0003-4045-9724; Shao-Ling Song 0000-0002-1077-8890; Yu-Rong Tang 0000-0002-5962-0664; Ji-Liang Wang 0000-0002-8650-3076.

S-Editor: Fan JR L-Editor: A P-Editor: Fan JR

REFERENCES

- Rodríguez-García R, Espina Angulo MJ, Escudero Augusto D. Cutaneous infection with Mycobacterium abscessus. 1 Intensive Care Med 2018; 44: 2292-2293 [PMID: 29974168 DOI: 10.1007/s00134-018-5284-8]
- Aziz DB, Low JL, Wu ML, Gengenbacher M, Teo JWP, Dartois V, Dick T. Rifabutin Is Active against Mycobacterium 2 abscessus Complex. Antimicrob Agents Chemother 2017; 61 [PMID: 28396540 DOI: 10.1128/AAC.00155-17]
- Gutiérrez AV, Viljoen A, Ghigo E, Herrmann JL, Kremer L. Glycopeptidolipids, a Double-Edged Sword of the 3 Mycobacterium abscessus Complex. Front Microbiol 2018; 9: 1145 [PMID: 29922253 DOI: 10.3389/fmicb.2018.01145]
- 4 Benwill JL, Wallace RJ Jr. Mycobacterium abscessus: challenges in diagnosis and treatment. Curr Opin Infect Dis 2014; 27: 506-510 [PMID: 25268925 DOI: 10.1097/QCO.00000000000104]
- 5 Petrini B. Mycobacterium abscessus: an emerging rapid-growing potential pathogen. APMIS 2006; 114: 319-328 [PMID: 16725007 DOI: 10.1111/j.1600-0463.2006.apm 390.x]
- Koh WJ, Jeon K, Lee NY, Kim BJ, Kook YH, Lee SH, Park YK, Kim CK, Shin SJ, Huitt GA, Daley CL, Kwon OJ. 6 Clinical significance of differentiation of Mycobacterium massiliense from Mycobacterium abscessus. Am J Respir Crit Care Med 2011; 183: 405-410 [PMID: 20833823 DOI: 10.1164/rccm.201003-0395OC]
- Lee SA, Raad II, Adachi JA, Han XY. Catheter-related bloodstream infection caused by Mycobacterium brumae. J Clin Microbiol 2004; 42: 5429-5431 [PMID: 15528764 DOI: 10.1128/JCM.42.11.5429-5431.2004]
- Laurens C, Héry-Arnaud G, Chiron R, Oziol E, Jean-Pierre H, Bouzinbi N, Vande Perre P, Bañuls AL, Godreuil S. Sacroiliitis secondary to catheter-related bacteremia due to Mycobacterium abscessus (sensu stricto). Ann Clin Microbiol Antimicrob 2014; 13: 9 [PMID: 24479655 DOI: 10.1186/1476-0711-13-9]
- Griffith DE, Brown-Elliott BA, Benwill JL, Wallace RJ Jr. Mycobacterium abscessus. "Pleased to meet you, hope you guess my name...". Ann Am Thorac Soc 2015; 12: 436-439 [PMID: 25643064 DOI: 10.1513/AnnalsATS.201501-01501]
- Mooren VHJF, Bleeker MWP, van Ingen J, Hermans MHA, Wever PC. Disseminated Mycobacterium abscessus infection in a peritoneal dialysis patient. IDCases 2017; 9: 6-7 [PMID: 28529886 DOI: 10.1016/j.idcr.2017.05.001]
- Bechara C, Macheras E, Heym B, Pages A, Auffret N. Mycobacterium abscessus skin infection after tattooing: first case 11 report and review of the literature. Dermatology 2010; 221: 1-4 [PMID: 20558973 DOI: 10.1159/000313974]
- 12 Drage LA, Ecker PM, Orenstein R, Phillips PK, Edson RS. An outbreak of Mycobacterium chelonae infections in tattoos. J Am Acad Dermatol 2010; 62: 501-506 [PMID: 19733936 DOI: 10.1016/j.jaad.2009.03.034]
- 13 Xie O, Khan S, Globan M, Lea K, Bajel A, Slavin M. Mycobacterium abscessus bloodstream infection: Unexpected catheter tunnel infection localized by PET/CT. Transpl Infect Dis 2019; 21: e13147 [PMID: 31306546 DOI: 10.1111/tid.13147
- Ruiz-Ruigómez M, Fernández-Ruiz M, San-Juan R, López-Medrano F, Orellana MÁ, Corbella L, Rodríguez-Goncer I, 14 Hernández Jiménez P, Aguado JM. Impact of duration of antibiotic therapy in central venous catheter-related bloodstream infection due to Gram-negative bacilli. J Antimicrob Chemother 2020; 75: 3049-3055 [PMID: 32591804 DOI: 10.1093/jac/dkaa244]
- 15 Tarpatzi A, Avlamis A, Papaparaskevas J, Daikos GL, Stefanou I, Katsandri A, Vasilakopoulou A, Chatzigeorgiou KS, Petrikkos GL. Incidence and risk factors for central vascular catheter-related bloodstream infections in a tertiary care hospital. New Microbiol 2012; 35: 429-437 [PMID: 23109010]
- 16 Kameyama H, Mori Y, Kimura T, Sugishita C, Adachi T, Sonomura K, Kusaba T, Tanda S, Kishimoto N, Okigaki M, Hatta T, Matsubara H. A case report of Mycobacterium abscessus peritonitis in a peritoneal dialysis patient. Ther Apher



Dial 2007; 11: 449-451 [PMID: 18028172 DOI: 10.1111/j.1744-9987.2007.00526.x]

17 Ellis EN, Schutze GE, Wheeler JG. Nontuberculous mycobacterial exit-site infection and abscess in a peritoneal dialysis patient. A case report and review of the literature. Pediatr Nephrol 2005; 20: 1016-1018 [PMID: 15880270 DOI: 10.1007/s00467-005-1870-4]





Published by Baishideng Publishing Group Inc 7041 Koll Center Parkway, Suite 160, Pleasanton, CA 94566, USA Telephone: +1-925-3991568 E-mail: bpgoffice@wjgnet.com Help Desk: https://www.f6publishing.com/helpdesk https://www.wjgnet.com

