

World Journal of *Clinical Cases*

World J Clin Cases 2023 August 26; 11(24): 5628-5839



MINIREVIEWS

- 5628 Effect of pesticides on phosphorylation of tau protein, and its influence on Alzheimer's disease
Torres-Sánchez ED, Ortiz GG, Reyes-Uribe E, Torres-Jasso JH, Salazar-Flores J

ORIGINAL ARTICLE**Case Control Study**

- 5643 Reduction rate of monoclonal protein as a useful prognostic factor in standard-risk group of newly diagnosed multiple myeloma
Liu M, Zhang JY

Retrospective Cohort Study

- 5653 Effectiveness of treating menorrhagia using microwave endometrial ablation at a frequency of 2.45 GHz
Kakinuma T, Kaneko A, Kakinuma K, Matsuda Y, Yanagida K, Takeshima N, Ohwada M

- 5660 Benefits of laparoscopy-assisted ileostomy in colorectal cancer patients with bowel obstruction
Wang YJ, Lin KH, Kang JC, Hu JM, Chen CY, Pu TW

Retrospective Study

- 5666 Hypopharyngeal cancer trends in a high-incidence region: A retrospective tertiary single center study
Cordunianu AGV, Ganea G, Cordunianu MA, Cochior D, Moldovan CA, Adam R

- 5678 Relevant detection indicator of prethrombotic state in patients with primary hypertension
Luo J, Yang T, Ding L, Xiong JH, Ying T, Xu F

- 5692 Clinical study of extrahepatic biliary adenoma
Li W, Tao J, Song XG, Hou MR, Qu K, Gu JT, Yan XP, Yao BW, Qin YF, Dong FF, Sha HC

SYSTEMATIC REVIEWS

- 5700 Sodium-glucose cotransporter-2 inhibitor-associated euglycemic diabetic ketoacidosis in COVID-19-infected patients: A systematic review of case reports
Khedr A, Hennawi HA, Khan MK, Eissa A, Mir M, Rauf I, Nitesh J, Surani S, Khan SA

META-ANALYSIS

- 5710 Efficacy and safety of Huangqi Jianzhong decoction in the treatment of chronic atrophic gastritis: A meta-analysis
Yan XP, Si W, Ding MS, Tian YF, Guo Z

CASE REPORT

- 5721** Malignant melanoma of the prostate: Primary or metastasis? A case report
Zhao H, Liu C, Li B, Guo JM
- 5729** Intravenous leiomyoma of the uterus extending to the pulmonary artery: A case report
Huang YQ, Wang Q, Xiang DD, Gan Q
- 5736** Percutaneous endoscopic necrosectomy for walled-off necrosis in the retroperitoneal space of the elderly: A case report
Sato K, Shibukawa G, Ueda K, Nakajima Y, Togashi K, Ohira H
- 5742** Acute exacerbation of idiopathic pulmonary fibrosis treated using the Feibi recipe: Two case reports
Liu ZH, Li GD, Hao QX, Cao F, Cheng Y, Kou MJ, Jiao Y
- 5749** Neonatal erythema multiforme associated with a rotavirus infection: A case report
Kim JJ, Lee JK
- 5755** Hemorrhagic Bartholin's cyst in a woman using anti-platelet medication: A case report and review of the literature
Li YR, Ding DC
- 5762** Subintimal recanalization for non-acute occlusion of intracranial vertebral artery in an emergency endovascular procedure: A case report
Fu JF, Zhang XL, Lee SY, Zhang FM, You JS
- 5772** Synchronous rectal adenocarcinoma and intestinal mantle cell lymphoma: A case report
Vu KV, Trong NV, Khuyen NT, Huyen Nga D, Anh H, Tien Trung N, Trung Thong P, Minh Duc N
- 5780** Focal lymphoblastic transformation of chronic myelogenous leukemia develops into erythroid leukemia: A case report
Wang W, Chen YL, Gou PP, Wu PL, Shan KS, Zhang DL
- 5789** Intraoperative sudden arrhythmias in cervical spine surgery adjacent to the stellate ganglion: A case report
Seo JH, Cho SY, Park JH, Seo JY, Lee HY, Kim DJ
- 5797** Papillary thyroid carcinoma with nodular fasciitis-like stroma - an unusual variant with distinctive histopathology: A case report
Hu J, Wang F, Xue W, Jiang Y
- 5804** Malignant form of hidroacanthoma simplex: A case report
Yang YF, Wang R, Xu H, Long WG, Zhao XH, Li YM
- 5811** Penile and scrotal strangulation by stainless steel rings in an human immunodeficiency virus positive man: A case report
Usuda D, Kaminishi N, Kato M, Sugawara Y, Shimizu R, Inami T, Tsuge S, Sakurai R, Kawai K, Matsubara S, Tanaka R, Suzuki M, Shimozawa S, Hotchi Y, Osugi I, Katou R, Ito S, Mishima K, Kondo A, Mizuno K, Takami H, Komatsu T, Oba J, Nomura T, Sugita M

- 5817** Persistent postoperative hypotension caused by subclinical empty sella syndrome after a simple surgery: A case report
Zhao KM, Hu JS, Zhu SM, Wen TT, Fang XM
- 5823** Rare *ROS1-CENPW* gene in pancreatic acinar cell carcinoma and the effect of crizotinib plus AG chemotherapy: A case report
Wang T, Shen YY
- 5830** Fecal transplantation in patient with metastatic melanoma refractory to immunotherapy: A case report
del Giglio A, Atui FC
- 5835** Left hepatic artery pseudoaneurysm complicating endoscopic retrograde cholangiopancreatography: A case report
Li QM, Ye B, Yang SW, Zhao H

ABOUT COVER

Editorial Board Member of *World Journal of Clinical Cases*, Kelsner de Souza Kock, PhD, Physiotherapist, Professor, Department of Physiotherapy/Medicine, University of South of Santa Catarina, Tubarão 88700000, SC, Brazil. kelsnerkock@yahoo.com.br

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 abstracted and indexed in Science Citation Index Expanded (SCIE, also known as SciSearch®), Journal Citation Reports/Science Edition, Current Contents®/Clinical Medicine, PubMed, PubMed Central, Reference Citation Analysis, China National Knowledge Infrastructure, China Science and Technology Journal Database, and Superstar Journals Database. The 2023 Edition of Journal Citation Reports® cites the 2022 impact factor (IF) for *WJCC* as 1.1; IF without journal self cites: 1.1; 5-year IF: 1.3; Journal Citation Indicator: 0.26; Ranking: 133 among 167 journals in medicine, general and internal; and Quartile category: Q4.

RESPONSIBLE EDITORS FOR THIS ISSUE

Production Editor: *Ying-Yi Yuan*; Production Department Director: *Xu Guo*; Editorial Office Director: *Jin-Lei Wang*.

NAME OF JOURNAL

World Journal of Clinical Cases

ISSN

ISSN 2307-8960 (online)

LAUNCH DATE

April 16, 2013

FREQUENCY

Thrice Monthly

EDITORS-IN-CHIEF

Bao-Gan Peng, Jerzy Tadeusz Chudek, George Kontogeorgos, Maurizio Serati, Ja Hyeon Ku

EDITORIAL BOARD MEMBERS

<https://www.wjgnet.com/2307-8960/editorialboard.htm>

PUBLICATION DATE

August 26, 2023

COPYRIGHT

© 2023 Baishideng Publishing Group Inc

INSTRUCTIONS TO AUTHORS

<https://www.wjgnet.com/bpg/gerinfo/204>

GUIDELINES FOR ETHICS DOCUMENTS

<https://www.wjgnet.com/bpg/GerInfo/287>

GUIDELINES FOR NON-NATIVE SPEAKERS OF ENGLISH

<https://www.wjgnet.com/bpg/gerinfo/240>

PUBLICATION ETHICS

<https://www.wjgnet.com/bpg/GerInfo/288>

PUBLICATION MISCONDUCT

<https://www.wjgnet.com/bpg/gerinfo/208>

ARTICLE PROCESSING CHARGE

<https://www.wjgnet.com/bpg/gerinfo/242>

STEPS FOR SUBMITTING MANUSCRIPTS

<https://www.wjgnet.com/bpg/GerInfo/239>

ONLINE SUBMISSION

<https://www.f6publishing.com>

Acute exacerbation of idiopathic pulmonary fibrosis treated using the Feibi recipe: Two case reports

Zhao-Heng Liu, Guo-Dong Li, Qing-Xun Hao, Fang Cao, Yu Cheng, Meng-Jia Kou, Yang Jiao

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
Grade D (Fair): D
Grade E (Poor): 0

P-Reviewer: Cheng TH, Taiwan; Vignozzi L, Italy

Received: April 16, 2023

Peer-review started: April 16, 2023

First decision: May 19, 2023

Revised: June 25, 2023

Accepted: July 31, 2023

Article in press: July 31, 2023

Published online: August 26, 2023



Zhao-Heng Liu, School of Life Sciences, Beijing University of Chinese Medicine, Beijing 102488, China

Guo-Dong Li, Department of Respiratory, Beijing Changping Hospital of Integrated Traditional Chinese and Western Medicine, Beijing 102208, China

Qing-Xun Hao, Fang Cao, Yu Cheng, Meng-Jia Kou, Yang Jiao, Dongfang Hospital Affiliated to Beijing University of Chinese Medicine, Beijing 100078, China

Corresponding author: Yang Jiao, MD, Professor, Dongfang Hospital Affiliated to Beijing University of Chinese Medicine, No. 6 Fang Zhuang Fang Xing Yuan, Fengtai District, Beijing 100078, China. yangjiao2013@sina.cn

Abstract

BACKGROUND

Rationale: No other treatment besides lung transplant is effective for idiopathic pulmonary fibrosis (IPF). Patients with IPF have poor prognosis, which may eventually lead to death. Patient concerns: Two female patients were diagnosed with IPF. In our recent follow-up, both these patients maintained a good quality of life.

CASE SUMMARY

Diagnosis: Both patients had dry cough and progressive dyspnea. Interventions: The first patient was treated with prednisone, and the second patient was treated with prednisone and tripterygium glycosides. However, the symptoms did not improve and fibrosis was not controlled. Thus, the Feibi recipe was used. Outcomes: No deterioration was observed after the treatment, and the dry cough and its effect were ameliorated. Furthermore, they are still alive and the quality of their lives has improved.

CONCLUSION

These two cases suggest that the Feibi recipe and other traditional Chinese medicine therapies could be beneficial for IPF treatment.

Key Words: Acute exacerbation; Idiopathic pulmonary fibrosis; Traditional Chinese medicine; Case report

©The Author(s) 2023. Published by Baishideng Publishing Group Inc. All rights reserved.

Core Tip: In this report, we present the cases of two patients diagnosed with idiopathic pulmonary fibrosis with progressive fibrosing who received traditional Chinese medicine (TCM). The disease progression slowed down, and the symptoms were relieved. After several years of follow-up, we collected their medical history, computed tomography scans, and found that the patients had a moderate quality of life after the TCM treatment.

Citation: Liu ZH, Li GD, Hao QX, Cao F, Cheng Y, Kou MJ, Jiao Y. Acute exacerbation of idiopathic pulmonary fibrosis treated using the Feibi recipe: Two case reports. *World J Clin Cases* 2023; 11(24): 5742-5748

URL: <https://www.wjgnet.com/2307-8960/full/v11/i24/5742.htm>

DOI: <https://dx.doi.org/10.12998/wjcc.v11.i24.5742>

INTRODUCTION

Idiopathic pulmonary fibrosis (IPF) is a chronic progressive fibrosing interstitial pneumonia of unknown cause and a fatal lung disease[1]. The incidence of IPF has been increasing annually, and the median survival of patients diagnosed with IPF is only 2-3 years, with the 5-year survival rate being < 40%[2]. The World Health Organization has listed IPF as one of the refractory diseases and a danger to human health in the 21st century.

The hypothesis proposed was that the pathogenesis of IPF is closely associated with the role of alveolar-capillary barrier basement membrane in retaining the architecture of the injured lung and the contribution of transforming growth factor- β -persistent antigens, bone marrow-derived progenitor cells, and other factors[3].

Except for lung transplantation, no other treatments are effective for IPF[1]. Moreover, lung transplantation has certain limitations, such as high cost and lack of lung sources.

The Feibi recipe, a formula developed by Professor Ping'an Zhou with more than 50 years of clinical experience, was used to treat pulmonary fibrosis and evaluate the symptoms of the patients in this study.

CASE PRESENTATION

Chief complaints

Case 1: A 78-year-old woman was admitted to our hospital in November 2012.

Case 2: A 64-year-old woman with an 18-month history of persistent dry cough and progressive dyspnea on exertion was referred to our hospital in October 2002.

History of present illness

Case 1: The reason of admission was dry cough and worsening dyspnea within the last 3 years. Three years ago, she was diagnosed with IPF in Beijing Chaoyang Hospital, and the diagnosis was based on the clinical symptoms and medical examination findings. High-resolution computed tomography (HRCT) revealed subpleural reticular opacities predominantly in the bilateral lobes (Figure 1A). The bronchoalveolar lavage fluid contained 72.5% neutrophils, which was apparently higher than the normal range (< 3%). The patient was treated with two antibiotics because of lung inflammation and an increase in the leukocyte count ($8.27 \times 10^9/L$). Prednisone was used to treat IPF. Although the infection was contained, the dry cough became more frequent and the dyspnea worsened.

Case 2: The patient was referred to our hospital in October 2002 for an 18-month history of persistent dry cough and progressive dyspnea on exertion. She was diagnosed with IPF at Peking Union Medical College Hospital based on her symptoms and physical and chemical examination findings. HRCT of the chest revealed basal and peripheral predominant reticular abnormality with honeycombing (Figure 2A). Velcro rales could be heard over both lung fields. The pulmonary function test revealed a total lung capacity of 1.41 L (64.3% of the predicted) and a forced vital capacity of 2.10 L (90.4% of the predicted). Meanwhile, the diffusion for carbon monoxide was 55.2% of the predicted. The results of fiberoptic bronchoscopy were normal. Meanwhile, the rheumatoid factors and other tests excluded secondary pulmonary fibrosis. She was receiving prednisone and tripterygium glycosides from the hospital for nearly a year and a half, but there was no improvement.

History of past illness

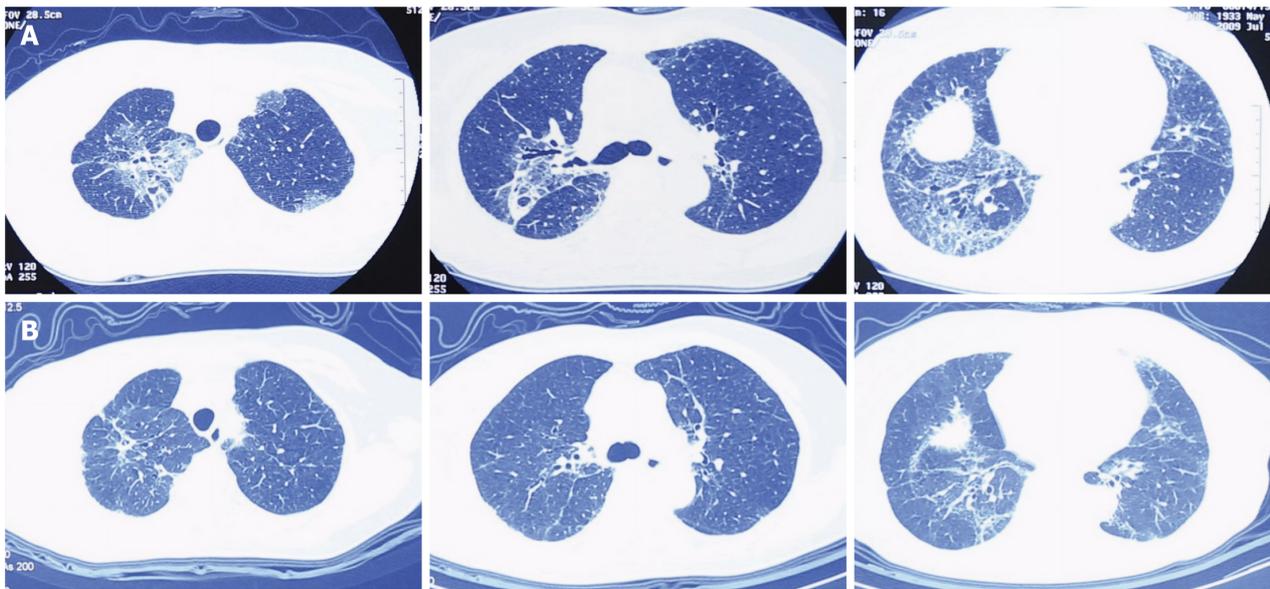
The patient had no chronic disease and no history of surgery.

Personal and family history

The patient had no personal and family history.

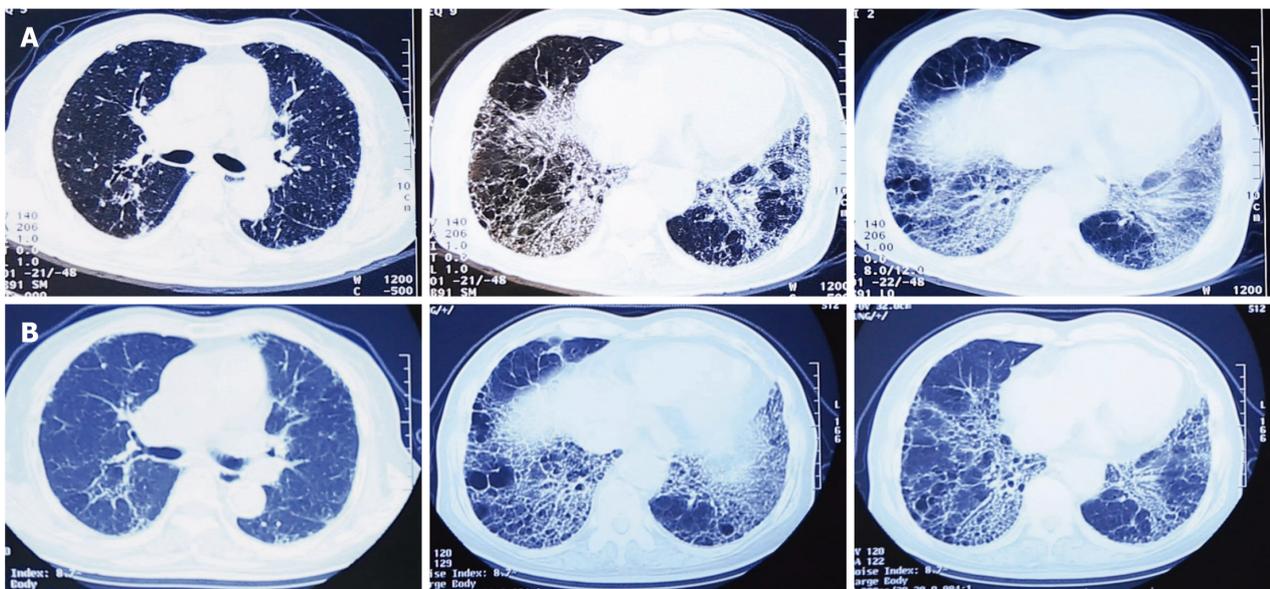
Physical examination

Case 1: The vital signs were as follows: Temperature: 36.4 °C, blood pressure: 132/77 mmHg, heart rate: 91 beats per



DOI: 10.12998/wjcc.v11.i24.5742 Copyright ©The Author(s) 2023.

Figure 1 High-resolution computed tomography scans in July 2009 and March 2016. A: July 2009; B: March 2016. There is no superimposition on the background of lung fibrosis, and improvements could be observed after the treatment.



DOI: 10.12998/wjcc.v11.i24.5742 Copyright ©The Author(s) 2023.

Figure 2 High-resolution computed tomography scans in October 2002 and February 2011. A: October 2002; B: February 2011. There is no superimposition on the background of lung fibrosis, and improvements could be observed after the treatment.

minute, and respiratory rate: 23 breaths per minute.

Case 2: Her vital signs were as follows: Temperature: 36.3 °C, blood pressure: 138/82 mmHg, heart rate: 71 beats per minute, and respiratory rate: 20 breaths per minute.

Laboratory examinations

Case 1: The results of the blood routine test were normal.

Case 2: The results of blood routine tests and rheumatoid factor were normal.

Imaging examinations

Case 1: HRCT revealed fibrosis in both lungs, with ground-glass density and grid-like changes.

Case 2: HRCT of the chest revealed basal and peripheral predominant reticular abnormality with honeycombing and bronchiectasis.

The treatment formulas used for these two cases

Case 1: Radix astragali 20 g, Flos lonicerae japonicae 20 g, Fritillaria 10 g, Radix et Rhizoma Glycyrrhizae 10 g, Radix Angelicae sinensis 6 g, Rhizoma dioscoreae nipponicae 15 g, Folium pyrrosiae 15 g, Radix trichosanthis 15 g, Ganoderma 15 g, Radix et rhizoma rhodiolae crenulatae 15 g, Radix adenophorae 15 g, and Bulbus lilii 15 g.

Case 2: Radix astragali 20 g, Flos lonicerae japonicae 20 g, Radix et rhizoma glycyrrhizae 10 g, Radix angelicae sinensis 10 g, Ganoderma 15 g, Radix et rhizoma rhodiolae crenulatae 15 g, Semen armeniacae amarum 9 g, Radix puerariae lobatae 15 g, Radix paeoniae alba 15 g, Folium mori 30 g, and Caulis perillae 10 g.

FINAL DIAGNOSIS

The final diagnosis was IPF. Both patients had dry cough and progressive dyspnea.

TREATMENT

The patients received the Feibi recipe continuously. In the first patient, the symptoms were controlled. On HRCT, there was no superimposition on the background of lung fibrosis, and improvements were observed after the treatment (Figure 1B). In the second patient, most of the symptoms had improved, and there was no new progression based on HRCT (Figure 2B).

OUTCOME AND FOLLOW-UP

Visual analog scale, Leicester cough questionnaire, and chronic cough impact questionnaire were used to evaluate the effect of the disease before and after the treatment, such as on physiological and social function, mental health, and vitality. To an extent, that could reflect the efficacy of the Feibi recipe. The results revealed that the treatment relieved the cough and its effects as well as the quality of life of the patients (Tables 1-4).

DISCUSSION

Herein, we report the cases of two patients who were diagnosed with IPF based on HRCT and fiberoptic bronchoscopy. Despite treatment with prednisone, the course of pulmonary fibrosis was not controlled. Therefore, traditional Chinese medicine (TCM) was used as an alternative for treating IPF. After treatment with the Feibi recipe, HRCT revealed no deterioration, and the dry cough and its effects were ameliorated. Furthermore, the patients are still alive, and their quality of their lives has improved.

In TCM thesis, IPF belongs to the category of “lung paralysis” and “lung asthenia.” Its basic pathogenesis is mainly related to lung Qi deficiency and exogenous pathogenic factors that attack and penetrate the cells, causing heat and toxin accumulation.

The Feibi recipe is a TCM formula that is composed of Radix astragali, Flos lonicerae japonicae, and other components. Radix astragali nourishes Qi and resolves the toxins. Flos lonicerae japonicae clears the heat and dissolves the toxins.

Pharmacological studies have demonstrated that Radix astragali contains astragalus saponins and polysaccharides, which play a vital role in immunoregulation[4]. Astragalus polysaccharides have been found to protect rat lung tissue from pulmonary fibrosis, showcasing their protective effects. Additionally, astragaloside, amino acids, and selenium present in Radix astragali exhibit anti-aging properties, counteract free radical damage, prevent lipid peroxidation, and possess anti-inflammatory effects.

Flos lonicerae japonicae, on the other hand, contains flavonoids and chlorogenic acid, which contribute to its broad-spectrum antibacterial and antiviral effects. Furthermore, the components found in Flos lonicerae japonicae exhibit anti-inflammatory, antipyretic, and antiendotoxin properties. These components have the ability to regulate immunity, enhance the phagocytic function of leukocytes, reduce inflammatory cells in lung tissues, and decrease hydroxyproline content, indicating their potential therapeutic benefits[5].

A report has suggested upregulation of transforming growth factor beta (TGF- β) ligands is observed in major pulmonary diseases, including pulmonary fibrosis[6]. The Feibi recipe has been reported to exhibit inhibitory effects on the phosphorylation of P38 mitogen-activated protein kinase, resulting in a decrease in the expression of TGF- β 1. Moreover, it has been found to downregulate the expression of interleukin-6 (IL-6) in lung tissue and reduce the content of type III collagen and hyaluronic acid in the serum. These findings suggest that the Feibi recipe possesses the potential to inhibit fibrosis and attenuate immunoinflammatory injury[7]. Moreover, it can reduce pathological response and inflammatory mediators, including IL-6, IL-13, IL-17, monocyte chemoattractant protein-1, tumor necrosis factor- α , and

Table 1 Comparison of visual analog scale, Leicester cough questionnaire, and chronic cough impact questionnaire before and after the treatment in case 1

	Score		
	VAS (day/night)	LCQ	CCIQ
Before the treatment	7.8/4.8	7.36	86
After the treatment	2.4/1.5	16.51	41

VAS: Visual analog scale; LCQ: Leicester cough questionnaire; CCIQ: Chronic cough impact questionnaire.

Table 2 Comparison of Leicester cough questionnaire before and after the treatment in case 1

	Score	
	Before the treatment	After the treatment
Physical function	2	4.38
Psychological function	2.86	6.14
Social function	2.5	6
Total	7.36	16.51

LCQ: Leicester cough questionnaire.

Table 3 Comparison of visual analog scale, Leicester cough questionnaire, and chronic cough impact questionnaire before and after the treatment in case 2

	Score		
	VAS (day/night)	LCQ	CCIQ
Before the treatment	8.3/5.1	9.54	77
After the treatment	2.0/2.0	17.92	37

VAS: Visual analog scale; LCQ: Leicester cough questionnaire; CCIQ: Chronic cough impact questionnaire.

Table 4 Comparison of Leicester cough questionnaire before and after the treatment in case 2

	Score	
	Before the treatment	After the treatment
Physical function	3	5.5
Psychological function	3.29	5.42
Social function	3.25	7
Total	9.54	17.92

LCQ: Leicester cough questionnaire.

plasma glutathione peroxidase, in rats with PM2.5-induced lung injury. No. 2 Feibi recipe appears to attenuate lung injury in rats induced by PM2.5[8]. Moreover, clinical studies have shown that the Feibi recipe can improve the quality of life of patients with IPF[9,10]. Other molecules such as obeticholic acid and components from plants like Curdione and Paeoniflorin also have the potential to treat pulmonary fibrosis[11-13].

CONCLUSION

The two cases presented here suggest that the Feibi recipe is effective and beneficial for the treatment of IPF. However, further clinical experience and studies are needed to verify this finding.

FOOTNOTES

Author contributions: Liu ZH and Li GD contribute equally to this work; Liu ZH wrote the paper; Li GD designed the report; Hao QX and Cao F collected the patients' clinical data and took pictures; Cheng Y and Kou MJ followed up the patients; Jiao Y treated the patients and support the research.

Supported by Beijing Natural Science Foundation, No. 7202118; National Natural Science Foundation of China, No. 81573970; and Basic Scientific Research Foundation of Beijing University of Chinese Medicine, No. 2021-JYB-XJSJ-033.

Informed consent statement: Written informed consent for publication of medical information was obtained from the patient.

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

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 non-commercial. See: <https://creativecommons.org/licenses/by-nc/4.0/>

Country/Territory of origin: China

ORCID number: Zhao-Heng Liu 0000-0002-4729-8102; Guo-Dong Li 0009-0002-4735-8395; Qing-Xun Hao 0000-0002-4259-0518; Fang Cao 0000-0003-0534-9781; Yu Cheng 0009-0004-5122-5290; Meng-Jia Kou 0000-0002-6001-5955; Yang Jiao 0000-0003-0262-4901.

S-Editor: Fan JR

L-Editor: A

P-Editor: Zhao S

REFERENCES

- Raghu G, Collard HR, Egan JJ, Martinez FJ, Behr J, Brown KK, Colby TV, Cordier JF, Flaherty KR, Lasky JA, Lynch DA, Ryu JH, Swigris JJ, Wells AU, Ancochea J, Bouros D, Carvalho C, Costabel U, Ebina M, Hansell DM, Johkoh T, Kim DS, King TE Jr, Kondoh Y, Myers J, Müller NL, Nicholson AG, Richeldi L, Selman M, Dudden RF, Griss BS, Protzko SL, Schönemann HJ; ATS/ERS/JRS/ALAT Committee on Idiopathic Pulmonary Fibrosis. An official ATS/ERS/JRS/ALAT statement: idiopathic pulmonary fibrosis: evidence-based guidelines for diagnosis and management. *Am J Respir Crit Care Med* 2011; **183**: 788-824 [PMID: 21471066 DOI: 10.1164/rccm.2009-040GL]
- Fernández Pérez ER, Daniels CE, Schroeder DR, St Sauver J, Hartman TE, Bartholmai BJ, Yi ES, Ryu JH. Incidence, prevalence, and clinical course of idiopathic pulmonary fibrosis: a population-based study. *Chest* 2010; **137**: 129-137 [PMID: 19749005 DOI: 10.1378/chest.09-1002]
- Strieter RM, Mehrad B. New mechanisms of pulmonary fibrosis. *Chest* 2009; **136**: 1364-1370 [PMID: 19892675 DOI: 10.1378/chest.09-0510]
- Zhang Y, Li JT, Liu YQ, Li J, SU Y, Yan CL, Nie L. [Effect of Astragalus polysaccharides on Th1 / Th2 cytokine balance and NO level in serum of pulmonary fibrosis rats]. *Zhongguo Laonianxue Zazhi* 2009; **29**: 35 [DOI: 10.3969/j.issn.1005-9202.2009.10.001]
- Zhang QX. [Research progress on pharmacological function and application of honeysuckle]. *Shandong Chemical Industry* 2023; **52**: 121-122+126 [DOI: 10.19319/j.cnki.issn.1008-021x.2023.03.039]
- Saito A, Horie M, Nagase T. TGF- β Signaling in Lung Health and Disease. *Int J Mol Sci* 2018; **19** [PMID: 30127261 DOI: 10.3390/ijms19082460]
- Jiao Y, Guan TY, Zhou PA. [Effect of FBR on p38MAPK and TGF - β 1 in lung tissue of pulmonary fibrosis rats]. *JTCM* 2007; **48**: 259-261 [DOI: 10.13288/j.11-2166/r.2007.03.039]
- Liu Z, Wang W, Cao F, Liu S, Zou X, Li G, Yang H, Jiao Y. Number 2 Feibi Recipe Reduces PM2.5-Induced Lung Injury in Rats. *Evid Based Complement Alternat Med* 2018; **2018**: 3674145 [PMID: 29541141 DOI: 10.1155/2018/3674145]
- Fu XF, Wu ZS, Cao F. [Clinical observation on 30 cases of IPF treated by FBR]. *Beijing Zhongyiyao Daxue Xuebao* 2015; **22**: 26-28 [DOI: 10.3969/j.issn.2095-6606.2015.04.008]
- Cao F, Wu ZS, Fu XF, Li H, Jiao Y. [Treatment of 22 cases of idiopathic pulmonary interstitial fibrosis with FBR]. *Huanqiu Zhongyiyao* 2015; **8**: 87-89 [DOI: 10.3969/j.issn.1674-1749.2015.01.023]
- Comeglio P, Filippi S, Sarchielli E, Morelli A, Cellai I, Corno C, Pini A, Adorini L, Vannelli GB, Maggi M, Vignozzi L. Therapeutic effects of osethicholic acid (OCA) treatment in a bleomycin-induced pulmonary fibrosis rat model. *J Endocrinol Invest* 2019; **42**: 283-294 [PMID: 29923060 DOI: 10.1007/s40618-018-0913-1]
- Liu P, Miao K, Zhang L, Mou Y, Xu Y, Xiong W, Yu J, Wang Y. Curdione ameliorates bleomycin-induced pulmonary fibrosis by repressing

- TGF- β -induced fibroblast to myofibroblast differentiation. *Respir Res* 2020; **21**: 58 [PMID: 32075634 DOI: 10.1186/s12931-020-1300-y]
- 13 Ji Y, Dou YN, Zhao QW, Zhang JZ, Yang Y, Wang T, Xia YF, Dai Y, Wei ZF. Paeoniflorin suppresses TGF- β mediated epithelial-mesenchymal transition in pulmonary fibrosis through a Smad-dependent pathway. *Acta Pharmacol Sin* 2016; **37**: 794-804 [PMID: 27133302 DOI: 10.1038/aps.2016.36]



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>

