

Integrated Traditional Chinese and Western Medicine for Non-Surgical Management of Stanford Type B Aortic Dissection: A Case Report and Clinical Observation

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Abstract: Objective: Aortic dissection is a life-threatening cardiovascular emergency. While surgical intervention is the standard treatment for Stanford Type A dissections, conservative management is often preferred for stable Stanford Type B cases, particularly in elderly patients or those with comorbidities. Integrating Traditional Chinese Medicine (TCM) with Western medical approaches may offer additional benefits in non-surgical cases. Methods: This case report presents a 70-year-old male patient diagnosed with Stanford Type B aortic dissection, who was managed non-surgically using an integrated treatment strategy. The Western medical regimen included blood pressure control, pain relief, anticoagulation, and infection management. Simultaneously, the patient received TCM interventions including herbal decoctions (based on Xuefu Zhuyu Decoction), acupuncture, and moxibustion, tailored to the syndrome of “qi stagnation, blood stasis, and heart yang deficiency.” Treatment efficacy was assessed through symptom relief, vital sign stabilization, and imaging findings. Results: Following 15 days of integrated treatment, the patient’s chest pain and fatigue were significantly relieved. Blood pressure was maintained within the target range (110–120/70–80 mmHg), and heart rate was stabilized below 60 beats/min. Imaging (CT angiography) confirmed no further expansion or progression of the dissection. The patient was discharged in stable condition and reported improved quality of life and functional status. Conclusion: This case suggests that integrating TCM with Western medicine may be a safe and effective approach for managing Stanford Type B aortic dissection in non-surgical patients. The combined strategy may enhance symptom control, stabilize hemodynamics, and support overall recovery. Further studies are needed to validate these findings in larger cohorts.

Keywords: Non-surgical treatment; Aortic dissection; Integrated Traditional Chinese and Western medicine; Clinical efficacy; Prognosis; Case observation

Introduction

Aortic dissection is a highly life-threatening cardiovascular condition. Its pathophysiology primarily involves a tear in the middle layer of the aortic wall, allowing blood to flow between the inner and middle layers, creating a true and false lumen. This process can lead to the spread of blood within the aortic wall, potentially causing severe complications such as acute cardiac tamponade, car-

diogenic shock, and acute renal failure^[1-4]. Based on the location of the dissection, aortic dissection is classified into Type A and Type B. Type A dissection involves the ascending aorta, progresses rapidly, and has a poor prognosis, while Type B dissection primarily affects the descending aorta and has a relatively slower progression^[5-6]. Clinical manifestations vary depending on the location and extent of the dissection. Common symptoms include sudden, severe chest or back pain, described as tearing, often accompanied by nausea, vomiting, and syncope. Some patients may exhibit fluctuating blood pressure, pulse discrepancies, or pleural effusion^[7-9]. Due to the rapid progression of aortic dissection, mortality is extremely high, particularly within the first 24 hours after onset. Without timely intervention, the risk of death increases significantly^[10].

Current treatment methods for aortic dissection are categorized into surgical treatment and conservative medical management. Surgical treatment is usually indicated for Type A dissections and for Type B dissections with serious complications. Particularly for patients with involvement of the ascending aorta, emergency surgery is the only effective intervention. Surgical approaches include aortic replacement and stent graft implantation, aimed at repairing the torn aortic wall or re-establishing blood flow. However, surgery carries significant risks, particularly for older patients or those with multiple underlying conditions, where perioperative complications are more frequent^[11-12]. As a result, surgery is not always the best option for all patients. Medical treatment focuses on blood pressure control, reducing cardiac load, and preventing further expansion of the dissection. Commonly used medications include beta-blockers, calcium channel blockers, and angiotensin-converting enzyme inhibitors, which effectively lower the stress on the aortic wall, thereby reducing the risk of dissection rupture^[13-14]. However, medical treatment alone may be insufficient for some patients, especially those with larger dissections or rapidly progressing conditions, where it may fail to halt disease progression.

In recent years, non-surgical treatment has garnered increasing attention, particularly for patients whose condition is relatively stable or who are not suitable candidates for surgery. The core of non-surgical treatment involves close monitoring of vital signs and pharmacological regulation to stabilize the dissection, while integrating Traditional Chinese Medicine (TCM) to improve the patient's overall functional status^[15]. According to TCM, aortic dissection falls under the categories of "chest obstruction" and "true heart pain," with its pathogenesis closely linked to qi stagnation, blood stasis, phlegm obstruction, and yang deficiency^[16-17]. TCM therapies, which promote blood circulation, regulate qi, remove obstruction, and strengthen vital energy, may play a positive role in reducing vascular stress, promoting vascular repair, and improving microcirculation^[18-20]. Thus, combining Chinese and Western medicine in the treatment of aortic dissection may offer a safe and effective non-surgical strategy. It could improve hemodynamics based on Western medical treatment while enhancing the patient's overall resilience and self-repair abilities through TCM interventions.

Based on this context, this paper presents a clinical observation of the efficacy of integrated Chinese and Western medicine in treating a non-surgical aortic dissection patient. The aim is to explore the clinical application value of this combined treatment approach and to summarize relevant experiences, providing new clinical insights for the management of similar cases in the future.

1. Case Information

1.1 Patient Basic Information

The patient, Zou Zhongqing, is a 70-year-old male farmer from Hengyang, Hunan Province. He was admitted to the hospital on October 15, 2023, with complaints of “chest pain and fatigue for 2 days.” His medical history includes hypertension, aortic dissection, coronary artery disease, and chronic rhinitis. He has no history of smoking or alcohol consumption.

1.2 Onset and Clinical Presentation

The patient reported experiencing chest pain in the precordial area and fatigue without any apparent cause starting on October 13, 2023. The pain was described as a continuous dull ache and was accompanied by poor appetite, but without symptoms of coughing, sputum production, palpitations, or fever. After self-medication at home without improvement, the patient sought medical attention on October 15. Upon admission, physical examination revealed: temperature 36.4°C, pulse 64 beats/min, respiration 19 breaths/min, blood pressure 132/79 mmHg, good mental status, no jaundice in the skin, normal sclera, soft abdomen without tenderness, and unremarkable cardiopulmonary examination.

1.3 Laboratory and Imaging Diagnostics

After admission, the patient underwent aortic angiography via CT scan, which revealed a “Stanford Type B aortic dissection,” accompanied by aortic sclerosis, chronic inflammation in both lungs, infection in the upper right lung, and cardiomegaly. Blood biochemical tests showed: alanine aminotransferase (ALT) 56 U/L, aspartate aminotransferase (AST) 66.9 U/L, indirect bilirubin 24.6 $\mu\text{mol/L}$, total bilirubin 33.5 $\mu\text{mol/L}$, and C-reactive protein (CRP) 4.84 mg/L, indicating mild liver function abnormalities and an inflammatory response.

1.4 Initial Treatment Plan

Since the dissection did not involve the ascending aorta or coronary arteries, there was no immediate indication for emergency surgery. A “non-surgical conservative treatment plan” was adopted. After admission, the patient was placed on electrocardiographic monitoring, and the main treatment measures were as follows: (1) Antihypertensive therapy: Administered antihypertensive medications to maintain blood pressure between 100-120 mmHg systolic to prevent further expansion of the dissection. (2) Beta-blockers: Metoprolol was used to reduce heart rate, decrease cardiac workload, and lower pressure on the aortic wall.

(3) Anti-inflammatory treatment: Antibiotics were given to treat the chronic lung inflammation and right lung infection. (4) Symptomatic treatment: This included cardioprotective drugs, pain relief, cardiac support, and medications to improve microcirculation.

2. Treatment Methods

2.1 Western Medicine Treatment Plan

Upon diagnosing the patient with Stanford Type B aortic dissection, the Western medicine treatment plan focused on blood pressure control, symptom management, and preventing complications. The specific treatment measures were as follows: (1) Blood pressure control: Although the patient's initial blood pressure of 132/79 mmHg was within a manageable range, stricter control was implemented to prevent further progression of the aortic dissection. Sodium nitroprusside was administered intravenously to rapidly reduce and stabilize blood pressure, with the goal of maintaining systolic pressure between 100-120 mmHg to reduce pressure on the aortic wall. Additionally, beta-blocker therapy (metoprolol) was used to lower the heart rate to below 60 beats/min, reducing cardiac output and further decreasing shear stress on the aortic wall. (2) Pain management: The patient presented with chest pain and fatigue, with the pain being described as typical tearing pain. Opioid analgesics (morphine) were administered to control pain, preventing sympathetic nervous system excitation, which could lead to elevated blood pressure. Pain levels were closely monitored to avoid overdose or addiction. (3) Anticoagulation therapy: Although no significant thrombosis was found at the dissection site, anticoagulation therapy was initiated to prevent potential thrombosis. Low-molecular-weight heparin (enoxaparin) was administered to prevent blood clot formation, particularly targeting the risk of stagnant blood flow in the false lumen. (4) Anti-inflammatory treatment: Auxiliary examinations indicated infection in the upper lobe of the right lung, so antibiotics (cephalosporins) were administered for anti-infection treatment. Inflammatory markers such as C-reactive protein (CRP) and white blood cell count were monitored to assess the effectiveness of infection control. (5) Cardiac monitoring and other symptomatic treatments: Continuous electrocardiographic monitoring was performed to observe changes in heart rate, blood pressure, and other vital signs. Supportive treatments, including cardioprotective drugs, cardiac support, and microcirculation improvement therapies, were administered as needed. The medication dosage was adjusted in real time to maintain stable blood pressure and prevent further expansion of the dissection.

2.2 Traditional Chinese Medicine (TCM) Treatment Plan

In the TCM approach, the treatment was based on the patient's overall condition and the syndrome differentiation of "chest obstruction and heart pain." The treatment focused on invigorating blood circulation, unblocking the meridians,

and strengthening qi (vital energy). A combination of internal herbal medicine and external therapies was applied.

(1) Syndrome Differentiation: The patient's condition was diagnosed as a syndrome of "qi stagnation and blood stasis, with heart yang deficiency." Aortic dissection, in TCM, falls under the categories of "chest obstruction" and "true heart pain," typically caused by qi stagnation and blood stasis. The patient's long history of hypertension led to yang deficiency and impaired qi circulation, resulting in blood stasis, obstructed blood flow, and chest pain.

(2) Herbal Prescription: Based on the syndrome differentiation, the following herbal treatment was prescribed: ① Basic Formula: Modified Xuefu Zhuyu Decoction (血府逐瘀汤). This formula uses peach kernel (桃仁) and safflower (红花) to invigorate blood and remove stasis, along with bupleurum (柴胡) and angelica (当归) to soothe the liver and relieve depression, and ligusticum (川芎) and red peony root (赤芍) to regulate qi and alleviate pain. ② Strengthening Qi and Supporting Vitality: Astragalus (黄芪) and codonopsis (党参) were added to the formula to tonify qi and strengthen the spleen, helping to restore yang qi. ③ Regulating Qi Flow: Agarwood (沉香) and sandalwood (檀香) were incorporated to regulate qi, relieve chest congestion, and alleviate symptoms of qi stagnation and chest tightness. ④ Formula Adjustments: In the early stages of the condition, when the pain was severe, the focus was on promoting blood circulation and unblocking the meridians. As the treatment progressed, herbs to tonify qi and blood, strengthen the body's defenses, and expel pathogens were gradually introduced. The dosage and composition of the formula were adjusted according to the patient's condition and symptom changes to ensure efficacy and avoid adverse reactions.

During the treatment process, TCM-specific therapies were integrated to enhance efficacy and alleviate symptoms. (1) Acupuncture Therapy: Daily acupuncture sessions were administered to regulate qi and blood, unblock meridians, and relieve pain. Key acupuncture points included Neiguan (内关), Shanzhong (膻中), Zusanli (足三里), and Qihai (气海) to facilitate the flow of qi and blood through the heart and chest meridians and harmonize the internal organs. Needles were retained for 30 minutes after insertion, and treatment was performed every other day for a total course of 10 days. (2) Moxibustion Therapy: Moxibustion was performed daily, focusing on the points Qihai (气海) and Guanyuan (关元) to warm and unblock the meridians while supporting the body's vital energy. Moxibustion helps to disperse cold, unblock the meridians, relieve pain, and strengthen the patient's yang energy. Each session lasted 15-20 minutes, performed once per day, with a treatment course of 10 days.

2.3 Adjustments During Treatment

As the patient's condition gradually stabilized, the treatment plan was adjusted accordingly based on changes in the clinical status: (1) Western Medicine Adjustments: Initially, the treatment focused on blood pressure control and pain

relief. As the patient's blood pressure stabilized, the use of sodium nitroprusside and analgesics was gradually reduced, transitioning to oral antihypertensive medications for maintenance. The anticoagulation therapy dosage was also adjusted based on the patient's coagulation function test results. (2) Traditional Chinese Medicine Adjustments: In the TCM treatment, as the patient's condition improved and pain subsided, the use of blood-invigorating and stasis-resolving herbs was gradually reduced. Instead, the focus shifted to tonifying qi and blood, strengthening the body's vital energy to support recovery and promote overall health.

2.4 Ethical Compliance and Safety Monitoring

This case report was conducted in accordance with the ethical standards of the institutional research committee and the Declaration of Helsinki. The patient provided written informed consent for the use of his medical information and images for academic publication purposes. The study did not involve any experimental procedures or off-label use of medications beyond established clinical guidelines.

Throughout the treatment process, safety monitoring was routinely performed. Vital signs were continuously monitored via electrocardiography, and laboratory tests—including liver and renal function panels, coagulation profiles, and inflammatory markers—were evaluated regularly to detect any adverse effects from pharmacologic therapy. No serious adverse events, such as drug-induced hypotension, bleeding, infection, or herb-related toxicity, were observed during hospitalization. All Traditional Chinese Medicine (TCM) treatments—including herbal decoctions, acupuncture, and moxibustion—were administered by licensed practitioners, and the patient tolerated them well without complications.

3. Observation of Treatment Efficacy

3.1 Symptom Relief

Upon admission, the patient complained of “precordial pain and fatigue.” Through integrated Traditional Chinese and Western medicine treatment, the patient's symptoms gradually improved: on the 3rd day of admission (October 17), the patient's chest pain had lessened, although fatigue persisted. By the 5th day (October 19), precordial pain had significantly reduced, and the fatigue had also markedly improved, with chest pain transitioning from continuous tearing pain to intermittent dull pain. On the 8th day (October 22), the patient's pain further subsided, with only occasional discomfort in the precordial area and complete resolution of fatigue. By the 12th day (October 26), the patient reported no significant precordial pain, only occasional dull pain, and an overall good condition. Before discharge (October 30), the patient experienced no chest or back pain, nor fatigue, with all symptoms effectively resolved, and their mental state returned to normal.

3.2 Blood Pressure Control

Upon admission, the patient's blood pressure was 132/79 mmHg, which was relatively high. Controlling blood pressure became a primary focus of treatment, using antihypertensive medications such as sodium nitroprusside and beta-blockers (metoprolol), with close monitoring of blood pressure changes. On the 2nd day of admission (October 16), after treatment, the patient's systolic pressure was maintained between 120-130 mmHg, and the heart rate remained below 60 beats/min. By the 5th day (October 19), blood pressure stabilized around 115/75 mmHg, and the heart rate further decreased to approximately 55 beats/min. On the 10th day (October 24), intravenous sodium nitroprusside was gradually discontinued, and the patient transitioned to oral antihypertensive medications, with blood pressure consistently maintained at 110/70 mmHg. Before discharge (October 30), the patient's blood pressure remained stable between 110-120/70-80 mmHg, with a heart rate of 55-60 beats/min, meeting the target range for blood pressure management.

3.3 Imaging Follow-up Results

The initial chest CT angiography (CTA) upon admission showed a "Stanford Type B aortic dissection," primarily involving the descending aorta and sparing the ascending aorta. On the 7th day of admission, the first imaging follow-up CTA was performed, which indicated that the aortic dissection had not progressed further, there were no new thrombi in the false lumen, and the condition of the aortic wall remained stable. A second CTA before discharge revealed that the dissection remained stable, with no signs of significant expansion. The blood flow in the false lumen was good, and no important branch vessels were involved, with normal blood flow in the descending aorta.

3.4 Patient Recovery Status

After 15 days of inpatient treatment, the patient showed good overall recovery. Through conservative treatment combining Traditional Chinese and Western medicine, symptoms such as precordial pain and fatigue gradually subsided and disappeared, blood pressure was well controlled, and imaging studies indicated that the aortic dissection remained stable without further expansion.

(1) Functional Recovery: During treatment, the patient progressively regained the ability to perform daily activities without experiencing chest or back pain, and the quality of life significantly improved.

(2) Quality of Life: Upon discharge, the patient was able to care for himself, with stable physical condition and no complaints of fatigue or chest tightness. His mental state was good. The patient was instructed to continue taking prescribed medications, undergo regular follow-ups, and avoid strenuous activities after discharge.

(3) Return to Work and Life: Although the patient recovered well, due to the history of aortic dissection, it was advised to continue avoiding heavy physical

labor to prevent blood pressure fluctuations that could lead to recurrence or expansion of the dissection.

4. Discussion

4.1 Theoretical Basis of Integrated Traditional Chinese and Western Medicine Treatment

The pathophysiology of aortic dissection primarily involves the tearing of the inner layer of the aortic wall, which allows blood to enter the middle layer, creating true and false lumens. This leads to hemodynamic abnormalities and a cardiovascular crisis ^[21]. In Western medicine, treatment focuses on stabilizing blood flow and reducing pressure on the aortic wall through antihypertensive medications, anticoagulation, and pain relief, thereby preventing further expansion of the dissection ^[22]. In Traditional Chinese Medicine (TCM), aortic dissection is considered to fall under the categories of “chest obstruction” and “true heart pain,” with the core pathogenesis being “qi stagnation and blood stasis” and “heart yang deficiency,” leading to impaired qi and blood circulation and organ dysfunction. TCM treatment aims to invigorate blood circulation and resolve stasis to improve hemodynamics ^[23-25]. Formulas such as Xuefu Zhuyu Decoction, which includes herbs like peach kernel (桃仁) and safflower (红花) to promote blood circulation and alleviate stasis, help enhance blood flow and reduce the burden on the aortic wall, preventing worsening of blood stasis. Patients with aortic dissection often present with qi deficiency and yang deficiency, which lower the body’s resistance ^[26-27]. TCM therapies that strengthen qi and the body’s constitution, such as using herbs like astragalus (黄芪) and codonopsis (党参), enhance the patient’s overall health and self-healing abilities. This complements Western treatments such as blood pressure control and anticoagulation, further stabilizing the condition. Additionally, TCM therapies like acupuncture and moxibustion regulate qi and blood, unblock meridians, relieve pain, and promote overall recovery. Acupuncture, in particular, has been widely recognized for its role in pain relief and cardiovascular function improvement ^[28-30]. While Western medicine focuses on quickly controlling blood pressure and alleviating pain, it does not directly address the underlying causes of the dissection. TCM, on the other hand, takes a holistic approach by tonifying qi, supporting vital energy, and promoting blood circulation. This not only reduces symptoms but also enhances the body’s reparative capacity, preventing recurrence. This systemic and comprehensive approach shows unique advantages in treating complex cases like aortic dissection.

4.2 Comparison with Purely Western Medicine Treatment

Compared to purely Western medicine treatments, such as medication or surgery, integrated Traditional Chinese and Western medicine for aortic dissection offers certain advantages in symptom relief, recovery time, and the preven-

tion of complications. Laio et al.^[31] showed that while Western medications, such as antihypertensives and anticoagulants, can quickly control blood pressure and temporarily alleviate symptoms, some patients still experience issues like large blood pressure fluctuations and recurring pain. Long-term use of antihypertensive drugs may also cause side effects, such as hypotension or bradycardia. Western medicine alleviates pain by reducing blood pressure and relieving stress on the aortic wall, but TCM's approach of invigorating blood circulation and resolving stasis helps promote smoother blood flow, thus addressing pain caused by blood stasis. In this case, combined acupuncture treatment led to faster pain relief compared to using analgesics alone. Studies have indicated^[32-33] that integrated treatments significantly improve blood circulation and physical recovery, with TCM formulas that tonify qi and strengthen the body accelerating functional recovery and enabling patients to return to normal life sooner. This patient experienced rapid relief of precordial pain and fatigue through integrated treatment and was discharged after 15 days. Furthermore, integrated treatment not only alleviates major symptoms but also helps prevent complications through TCM's holistic approach. For instance, the risk of further thrombosis due to blood stasis is reduced with TCM's blood-activating and stasis-resolving therapies, while qi-tonifying treatments enhance immune function, reducing the likelihood of worsening infections. Compared to purely Western medicine, the integrated approach in this case not only stabilized the patient's condition but also sped up recovery, reducing the side effects and complications associated with long-term Western drug use.

4.3 Necessity of Personalized Treatment

The treatment of aortic dissection must be tailored to each individual, particularly when deciding between surgical and conservative approaches. In this case, the patient had a Stanford Type B aortic dissection that did not involve the ascending aorta, nor were there any significant acute complications, so non-surgical conservative treatment was chosen. Integrated Traditional Chinese and Western medicine treatment shows great potential in non-surgical cases, especially for the following patient groups: (1) Patients without surgical indications or unsuitable for surgery: As seen in this case with a Stanford Type B dissection, integrated conservative treatment not only controls the condition but also uses TCM to regulate overall function, reducing the risk of recurrence or progression. (2) Elderly patients with multiple chronic conditions: This patient had comorbidities such as hypertension and coronary artery disease. Integrated TCM and Western treatments can holistically manage the cardiovascular system, mitigating the side effects of Western medications while improving the patient's quality of life. (3) Recovery phase patients: After the acute phase, many aortic dissection patients require long-term conservative treatment and regular follow-ups. TCM helps maintain stability by regulating qi and blood flow and unblocking meridians, thereby reducing the risk of recurrence. The promotion of integrated treatment has broad potential, but it requires personalized adjustments. Treatment plans

must be tailored to the patient's specific condition to maximize the complementary benefits of both Chinese and Western medicine.

5. Conclusion

5.1 Summary of Efficacy

In this case, the integrated Traditional Chinese and Western medicine treatment achieved significant clinical efficacy for a non-surgical Stanford Type B aortic dissection patient. The combination of Western medicine's antihypertensive, anticoagulant, and symptomatic treatments with Traditional Chinese Medicine's (TCM) holistic approach of invigorating blood circulation and tonifying qi successfully controlled the patient's blood pressure, alleviated chest pain, and relieved fatigue. Imaging studies confirmed that the aortic dissection did not progress further, and the patient's condition remained stable, allowing discharge within 15 days. Clinical results demonstrate that integrated treatment effectively relieved the patient's symptoms, improved prognosis, reduced complications, and enhanced quality of life.

5.2 Significance of the Study

The successful treatment in this case provides valuable clinical reference for the application of integrated treatment in non-surgical aortic dissection patients. By combining the hemodynamic management of Western medicine with the holistic regulation of TCM, this approach offers more comprehensive control of the condition while minimizing the side effects of Western medications. This case demonstrates that integrated treatment is not only suitable for acute symptom relief but also plays an important role during the recovery phase when the condition stabilizes. This method provides a new therapeutic approach for similar patients in future clinical practice.

5.3 Outlook

The application of integrated Traditional Chinese and Western medicine in cardiovascular diseases, particularly in complex conditions like aortic dissection, has broad prospects. Future research should further explore the specific mechanisms by which TCM influences hemodynamics and aortic repair processes, and large-scale clinical trials are needed to validate its efficacy and safety. Additionally, integrated treatment should focus on designing individualized plans tailored to each patient's pathological characteristics and underlying conditions to optimize treatment outcomes. This treatment model not only offers a better option for aortic dissection patients but also opens new directions and opportunities for the treatment of other cardiovascular diseases.

Limitations and Future Perspectives

This study has several limitations that must be acknowledged. First, as a single-case report, the findings lack generalizability and do not allow for causal inference. The absence of a control group further limits the ability to compare the

effects of integrated treatment with standard Western medicine alone. Second, while clinical symptoms and imaging outcomes were documented qualitatively, standardized quantitative assessments (e.g., pain scales, functional scoring, aortic measurements) were not systematically applied, which may affect the objectivity of efficacy evaluation. Third, long-term follow-up data were not available at the time of writing, making it difficult to assess the durability of symptom relief and dissection stability. Despite these limitations, the current case highlights the potential value of integrating Traditional Chinese and Western medicine in non-surgical management of Stanford Type B aortic dissection. Future research should aim to conduct prospective case series or controlled observational studies incorporating objective metrics and long-term outcomes to further validate this treatment approach.

References

- Ji, D., Wu, Z., Dai, H., Yang, J., Zhang, X., Jin, J., Li, Q., & Yao, H. (2022). Perioperative Complications and Post-operative Mortality in Patients of Acute Stanford Type a Aortic Dissection with Cardiac Tamponade. *Journal of Investigative Surgery*, 35, 1536 - 1543. <https://doi.org/10.1080/08941939.2022.2078022>.
- Samanidis, G., Kanakis, M., Kourelis, G., Kolovou, K., & Perreas, K. (2022). Acute renal failure after acute type A aortic dissection repair. Insidious postoperative complication with poor short- and long-term prognosis. *Journal of Cardiac Surgery*, 37, 2618 - 2620. <https://doi.org/10.1111/jocs.16613>.
- Wang, Y., Luo, K., Qiao, Y., & Fan, J. (2021). An integrated fluid-chemical model toward modeling the thrombus formation in an idealized model of aortic dissection. *Computers in biology and medicine*, 136, 104709 . <https://doi.org/10.1016/j.combiomed.2021.104709>.
- Takahashi, K., Sekine, T., Miyagi, Y., Shirai, S., Otsuka, T., Kumita, S., & Ishii, Y. (2021). Four-dimensional flow analysis reveals mechanism and impact of turbulent flow in the dissected aorta.. *European journal of cardio-thoracic surgery : official journal of the European Association for Cardio-thoracic Surgery*. <https://doi.org/10.1093/ejcts/ezab201>.
- Wang, X., Wang, C., Cheng, X., Hu, Y., Yang, L., & Wang, W. (2021). Application of the Type, Entry Site, and Malperfusion Classification in Treatment of Aortic Dissection.. *The heart surgery forum*, 24 5, E909-E915 . <https://doi.org/10.1532/hsf.4095>.
- Meccanici, F., Thijssen, C., Heijmen, R., Geuzebroek, G., Woorst, J., Gökalp, A., Bruin, J., Gratama, D., Bekkers, J., Kimmenade, R., Poyck, P., Peels, K., Post, M., Mokhles, M., Takkenberg, J., Roos-Hesselink, J., & Verhagen, H. (2023). Male-Female Differences in Acute Type B Aortic Dissection.. *Journal of the American Heart Association*, e029258 . <https://doi.org/10.1161/JAHA.122.029258>.
- Murillo, H., Molvin, L., Chin, A., & Fleischmann, D. (2021). Aortic Dissection and Other Acute Aortic Syndromes: Diagnostic Imaging Findings from Acute to Chronic Longitudinal Progression.. *Radiographics : a review publication of the Radiological Society of North America, Inc*, 41 2, 425-446 . <https://doi.org/10.1148/rg.2021200138>.
- Ke, C., Wu, H., Xi, M., Shi, W., Huang, Q., & Lu, G. (2021). Clinical features and risk factors of postoperative in-hospital mortality following surgical repair of Stanford type A acute aortic dissection. *BMC Cardiovascular Disorders*, 21. <https://doi.org/10.1186/s12872-021-02107-1>.
- Reutersberg, B., Trimarchi, S., Gilon, D., Kaiser, C., Harris, K., Shalhub, S., Reece, T., Nienaber, C., Ehrlich, M., Isselbacher, E., Oliveira, N., Montgomery, D., Eagle, K., Tolva, V., Chen, E., & Eckstein, H. (2021). Pleural effusion: a potential surrogate marker for higher-risk patients with acute type B aortic dissections.. *European journal of cardio-thoracic surgery : official journal of the European Association for Cardio-thoracic Surgery*. <https://doi.org/10.1093/ejcts/ezab540>.

Ren, Y., Zhang, J., Zhou, H., Xiong, W., Shi, W., Luo, M., Wei, Y., & Liu, D. (2021). Experience in curing refractory gastrointestinal bleeding due to type A aortic dissection combined with mesenteric artery malperfusion: a case report.. *Annals of palliative medicine*, 10 9, 10102-10107 . <https://doi.org/10.21037/apm-21-2173>.

Salem, M., Salib, M., Friedrich, C., Salem, M., Puehler, T., Schoettler, J., Schoeneich, F., Cremer, J., & Haneya, A. (2021). Influence of Age on Postoperative Neurological Outcomes after Surgery of Acute Type A Aortic Dissection. *Journal of Clinical Medicine*, 10. <https://doi.org/10.3390/jcm10081643>.

Pitts, L., Kofler, M., Montagner, M., Heck, R., Kurz, S., Buz, S., Falk, V., & Kempfert, J. (2023). The Impact of Malperfusion Patterns in Elderly Patients undergoing Surgery for Acute Type A Aortic Dissection.. *European journal of cardio-thoracic surgery : official journal of the European Association for Cardio-thoracic Surgery*. <https://doi.org/10.1093/ejcts/ezad288>.

Huang, Y., Chiu, K., Shen, C., Bair, M., & Chen, C. (2023). Evaluating Prescription Pattern and Effectiveness of Antihypertensive Drugs in Non-Operated Aortic Dissection Patients. *Journal of Clinical Medicine*, 12. <https://doi.org/10.3390/jcm12051962>.

Chen, S., Chan, Y., Lin, C., Wu, V., Cheng, Y., Chen, D., Chang, S., Hung, K., Chu, P., & Chou, A. (2021). Association of Long-term Use of Antihypertensive Medications With Late Outcomes Among Patients With Aortic Dissection. *JAMA Network Open*, 4. <https://doi.org/10.1001/jamanetworkopen.2021.0469>.

Arvin, S., Ahmad, K., Tang, M., Andersen, G., & Nørgaard, B. (2023). Conservative treatment of type A aortic dissection: a case report with 5 years of follow-up. *AME Case Reports*, 7. <https://doi.org/10.21037/acr-22-107>.

Ma, X., Ziyu, W., & Fan, X. (2023). A Preliminary Study on Fan Xiufeng's Clinical Experience in Treating Chest Arthralgia and Heart Pain with Yang Deficiency and Phlegm and Blood Stasis. *MEDS Chinese Medicine*. <https://doi.org/10.23977/medcm.2023.051002>.

Wang, Y., Tang, D., Zhang, H., & You, Y. (2023). [Role of lymphatic system in coronary heart disease based on theory of combined phlegm and stasis].. *Zhongguo Zhong yao za zhi = Zhongguo zhongyao zazhi = China journal of Chinese materia medica*, 48 15, 4072-4077 . <https://doi.org/10.19540/j.cnki.cjcm.20230427.601>.

Chao, T., Sun, J., Huan, N., Ge, Y., & Wang, C. (2023). Efficacy and safety of Qixue Tongzhi Granule in improving the exercise capacity of stable coronary artery disease: study protocol for a multicenter, randomized, double-blind, placebo-controlled trial. *Frontiers in Cardiovascular Medicine*, 10. <https://doi.org/10.3389/fcvm.2023.1186018>.

Zhao, C., Wang, W., Yan, K., Sun, H., Han, J., & Hu, Y. (2021). The therapeutic effect and mechanism of Qishen Yiqi dripping pills on cardiovascular and cerebrovascular diseases and diabetic complications.. *Current molecular pharmacology*. <https://doi.org/10.2174/1874467214666210811153610>.

Li, J., Du, Y., Cai, C., & Liu, F. (2022). Effectiveness and safety of treating carotid atherosclerotic plaques with the method of nourishing qi, promoting blood circulation and expelling phlegm: A systematic review and meta-analysis. *Frontiers in Pharmacology*, 13. <https://doi.org/10.3389/fphar.2022.1059737>.

Badeli, V., Jafarinia, A., Melito, G., Müller, T., Reinbacher-Köstinger, A., Hochrainer, T., Brenn, G., Ellermann, K., Bíró, O., & Kaltenbacher, M. (2022). Monitoring of false lumen thrombosis in type B aortic dissection by impedance cardiography – A multiphysics simulation study. *International Journal for Numerical Methods in Biomedical Engineering*, 39. <https://doi.org/10.1002/cnm.3669>.

Smedberg, C., Hultgren, R., Leander, K., & Steuer, J. (2022). Pharmacological treatment in patients with aortic dissection. *Open Heart*, 9. <https://doi.org/10.1136/openhrt-2022-002082>.

Xin, L., Jing, X., Li, H., Gan, W., & Ming, C. (2023). Efficacy and safety of activating blood circulation and removing blood stasis of Traditional Chinese Medicine for managing renal fibrosis in patients with chronic kidney disease: a systematic review and Meta-analysis.. *Journal of traditional Chinese medicine = Chung i tsa chih ying wen pan*, 43 3, 429-440 . <https://doi.org/10.19852/j.cnki.jtcm.20230308.003>.

Wang, Z., Li, L., Liu, J., Meng, H., Miao, L., Sun, M., & Zhang, Y. (2021). [Research progress of change of platelet in blood stasis syndrome and effect of traditional Chinese medicine].. *Zhongguo Zhong yao za zhi = Zhongguo zhongyao zazhi = China journal of Chinese materia medica*, 46 20, 5201-5209 . <https://doi.org/10.19540/j.cnki>.

cjcmm.20210629.701.

Lei, L., Li, X., Liu, J., Yang, L., Wang, X., & Wang, Z. (2022). [Chemical functionomics: a new direction for modern research on traditional Chinese medicine--a case study of core component group of hemostatic and blood-activating/stasis-resolving Chinese herbal drugs]. *Zhongguo Zhong yao za zhi = Zhongguo zhongyao zazhi = China journal of Chinese materia medica*, 47 24, 6803-6809 . <https://doi.org/10.19540/j.cnki.cjcmm.20220726.406>.

Liu, J., Yang, Y., Liu, X., Widjaya, A., Jiang, B., & Jiang, Y. (2021). Macrophage-biomimetic anti-inflammatory liposomes for homing and treating of aortic dissection.. *Journal of controlled release : official journal of the Controlled Release Society*. <https://doi.org/10.1016/j.jconrel.2021.07.032>.

Ohno, S., Aoki, H., Furusho, A., Hashimoto, Y., Nakao, E., Shibata, R., Nishida, N., Ito, S., Majima, R., & Fukumoto, Y. (2023). B cells and immunoglobulins promotes aortic dissection in mice. *European Heart Journal*. <https://doi.org/10.1093/eurheartj/ehad655.3223>.

Lu, L., He, W., Guan, D., Jiang, Y., Hu, G., Ma, F., & Chen, L. (2022). Acupuncture in treating cardiovascular disease complicated with depression: A systematic review and meta-analysis. *Frontiers in Psychiatry*, 13. <https://doi.org/10.3389/fpsy.2022.1051324>.

Yang, Y., Li, Y., Zheng, Y., Zhang, L., Ma, W., Shi, L., Kong, J., Liu, X., & Yu, H. (2022). The Effect of Acupuncture Combined with Aerobic Exercise for Coronary Heart Disease as Cardiac Rehabilitation. *Journal of Healthcare Engineering*, 2022. <https://doi.org/10.1155/2022/4903265>.

Wang, S., Liu, A., Wang, Z., & Zhang, Y. (2021). Efficacy and safety of acupuncture combined with Chinese herbal medicine in the treatment of angina pectoris of coronary heart disease (CHD). *Medicine*, 100. <https://doi.org/10.1097/MD.00000000000028450>.

Laio, K., Shen, C., Huang, Y., Lu, C., Lai, H., & Chen, C. (2023). Prescription pattern and effectiveness of antihypertensive drugs in patients with aortic dissection who underwent surgery. *Frontiers in Pharmacology*, 14. <https://doi.org/10.3389/fphar.2023.1291900>.

Pang, Q., Li, G., Cao, F., Liu, H., Wei, W., & Jiao, Y. (2022). Clinical efficacy of Chinese herbs for supplementing qi and activating blood circulation combined with N-acetylcysteine in the treatment of idiopathic pulmonary fibrosis: A systematic review and network meta-analysis. *PLoS ONE*, 17. <https://doi.org/10.1371/journal.pone.0265006>.

Li, J., Du, Y., Cai, C., & Liu, F. (2022). Effectiveness and safety of treating carotid atherosclerotic plaques with the method of nourishing qi, promoting blood circulation and expelling phlegm: A systematic review and meta-analysis. *Frontiers in Pharmacology*, 13. <https://doi.org/10.3389/fphar.2022.1059737>.