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LIFE IS LIKE RIDING A BICYCLE. TO KEEP YOUR BALANCE YOU MUST KEEP MOVING- ALBERT EINSTEIN

天可补,海可填,南山可移.日月既往,不可复追.（曾国藩）

Table of Contents

尊敬的读者:

感谢您正在阅读本期 CASA 协会的刊物。鉴于本刊并未设定同行评审（peer review）机制，于本刊所投及发表的学术文章可仍于今后发于 Peer Review 刊物。已正式发表的文章亦可于本刊物转载。本编辑部鼓励专业同行积极投稿，为我们麻醉事业的发展努力。

主编之语

通常的年末总会有一个小总结，毕竟是 2024 年的最后一期，只是词穷，不足以表达此刻的心境。虽然杂志平平淡淡，但也富有其内涵，它不张扬，却也有它的热烈。寒冬将至，它不会变冷，它会继续温暖的新的一年。

仅此以美好的歌词送给大家，期望各位都有一个更美好的 2025。

《明天会更好》

轻轻敲醒沉睡的心灵
慢慢张开你的眼睛
看看忙碌的世界
是否依然孤独地转个不停
春风不解风情
吹动少年的心
让昨日脸上的泪痕
随记忆风干了
抬头寻找天空的翅膀
候鸟出现它的影迹
带来远处的饥荒无情的战火
依然存在的消息
玉山白雪飘零
燃烧少年的心
使真情溶化成音符
倾诉遥远的祝福
唱出你的热情
伸出你双手让我拥抱着你的梦
让我拥有你真心的面孔
让我们的笑容
充满着青春的骄傲
为明天献出虔诚的祈祷

-罗大佑词，陈志远曲

Case Report

A novel approach to pain management for open abdominal aorta aneurysm repair

Xueqin Ding MD, Ph.D.

Introduction

Managing postoperative pain in open abdominal aortic aneurysm (AAA) repair presents significant challenges, especially in patients with complex medical histories. Currently, the focus on pain management has shifted to a multimodal analgesia approach that combines pharmacologic methods with regional anesthesia.

Recently, Methadone has gained popularity among pharmacological methods due to its ability to provide consistent pain control with fewer side effects. In terms of regional anesthesia, thoracic epidurals are often employed but can pose risks in patients with coagulation issues and multiple comorbidities. In contrast, fascial plane blocks, such as the bilateral external oblique intercostal fascial plane (EOI) block and bilateral transversus abdominis plane (TAP) block, have become popular for abdominal surgeries due to their ease of placement and lower complication rates. However, both methadone and EOI block have not been utilized for open AAA repair before.

In this report, we present a case where a multimodal analgesic approach, including methadone and EOI block, successfully provided sufficient pain management in a patient undergoing open AAA repair. This case demonstrates the potential benefits of this approach in managing pain for complex surgical cases.

Case Presentation

A 75-year-old male was referred to vascular surgery following the incidental finding of an infrarenal abdominal aortic aneurysm (AAA). His medical history included hypertension,

myocardial infarction with a left ventricular thrombus, a cerebrovascular accident without residual deficits, and renal cell carcinoma. It was decided that the patient would undergo a radical nephrectomy for the renal tumor concurrently with the AAA repair. Upon admission to the hospital, he was started on a heparin drip for the left ventricular thrombus.

Preoperatively, the patient received 20 mg of methadone for pain management. He was then brought to the operating room and underwent surgery under general anesthesia. At the end of the surgery, a bilateral external oblique intercostal fascial plane block with catheter placement was performed to cover the upper abdominal incision. Additionally, bilateral single shot TAP blocks were administered to cover the lower abdominal incision. Despite an estimated blood loss of five liters, the patient was extubated and transferred to the ICU in stable condition.

Remarkably, he was able to ambulate on the second day. On postoperative day 2, he was transferred to the general nursing floor. The patient required no additional pain medication on postoperative days 1 and 2, with pain scores consistently reported between 0-3. His pain was effectively managed with acetaminophen as needed from days 3-5. The patient was subsequently discharged on postoperative day 5.

Discussion

This case report illustrates the potential of combining methadone with the EOI fascial plane block as a viable option for managing postoperative pain in patients undergoing open AAA repair, particularly for those with contraindications to other pain management methods.

Traditionally, postoperative pain management in AAA repair has included thoracic epidurals, which are preferred for their efficacy in providing continuous analgesia. However, these methods carry significant risks, especially for patients on anticoagulation therapy, as in this case. The use of a thoracic epidural in such patients could lead to epidural hematoma formation, a serious complication given the patient's impaired coagulation due to the heparin drip.

The multimodal approach to pain management employed in this case, including the preoperative administration of methadone, likely contributed to the patient's reduced

postoperative pain levels. Studies have shown that methadone can improve pain control by 40-50% for a variety of surgical procedures without increasing complications [1].

The approach of utilizing the EOI fascial plane block in conjunction with a bilateral TAP block offers a promising alternative for achieving effective pain control without the inherent risks associated with epidurals. TAP blocks are typically utilized for lower abdominal incisions, offering effective pain relief by targeting the nerves within the abdominal wall. The EAO fascial plane block can provide comprehensive pain relief for the entire upper abdominal wall by effectively anesthetizing both anterior and lateral cutaneous branches of the thoracolumbar nerves T6-T9 [2]. Therefore, utilizing the EAO fascial plane block in conjunction with a bilateral TAP block could provide analgesia for the entire abdominal wall.

Conclusion: the combination of methadone and the EOI fascial plane block provided effective pain control for open AAA repair. The findings of this case may encourage further investigation into the methadone and EOI fascial plane block's efficacy and its broader application in upper abdominal surgeries, potentially offering a safer and more effective pain management solution for patients.

References:

1. Glenn S. Murphy, Joseph W. Szokol; Intraoperative Methadone in Surgical Patients: A Review of Clinical Investigations. Anesthesiology 2019; 131:678–692 doi: https://doi.org/10.1097/ALN.0000000000002755

2. Chin KJ, McDonnell JG, Carvalho B, Sharkey A, Pawa A, Gadsden J. Essentials of Our Current Understanding: Abdominal Wall Blocks. Reg Anesth Pain Med. 2017 Mar/Apr;42(2):133-183. doi: 10.1097/AAP.0000000000000545. PMID: 28085788.

Problem-Based Learning Discussion (PBLD)

Strategic Approach in Management of Complex Cardiac Patient with Hemodynamic Conflict of Interests

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Learning Objectives

1) Review the pathological clinical impact of underlying mixed cardiac diseases.
2) Identify the hemodynamic goals for patients with mixed diseases and conflicts of interest.
3) Define the role of echocardiography in evaluating complex cardiac disease and guide anesthesia and surgical decision-making.
4) Recognize the complexities and challenges when dealing with a patient with a failing heart, especially during weaning from cardiopulmonary bypass circuit (CPB).
5) Discuss strategic approaches including mechanical circulatory support devices (MCS) in the management of failing heart.

A 74-year-old male (90 kg and 173 cm) was admitted to the hospital for a cystoscopy procedure due to a diagnosis of kidney stones. His past medical history was significant for anemia, hyperlipidemia, chronic kidney disease, atrial fibrillation, s/p RFA and Medtronic pacer and AICD placement, diabetes mellitus, coronary artery disease, ischemic cardiomyopathy, and congestive heart failure (CHF). The patient denied symptoms of angina or shortness of breath. He stated that he had CHF exacerbation requiring admission a few years ago and a “silent” myocardial infarction a few months ago. Further hospital workup with transthoracic echocardiography revealed LVEF 20-25%, right ventricular systolic pressure (RVSP) estimated at 55-60 mmHg, and mitral valve moderate to severe regurgitation. Coronary angiogram revealed left anterior descending (LAD) 70% stenosis, Obtuse marginal 80% stenosis and right coronary artery (RCA) mid 70% stenosis. Other laboratory results Hb 8.7g, Hct 26.4%, BUN 30 mg/d, l Cr 1.55/dl, HbA1c 7.9. The patient was scheduled for coronary artery bypass (CABG) and possible mitral valve replacement surgery.

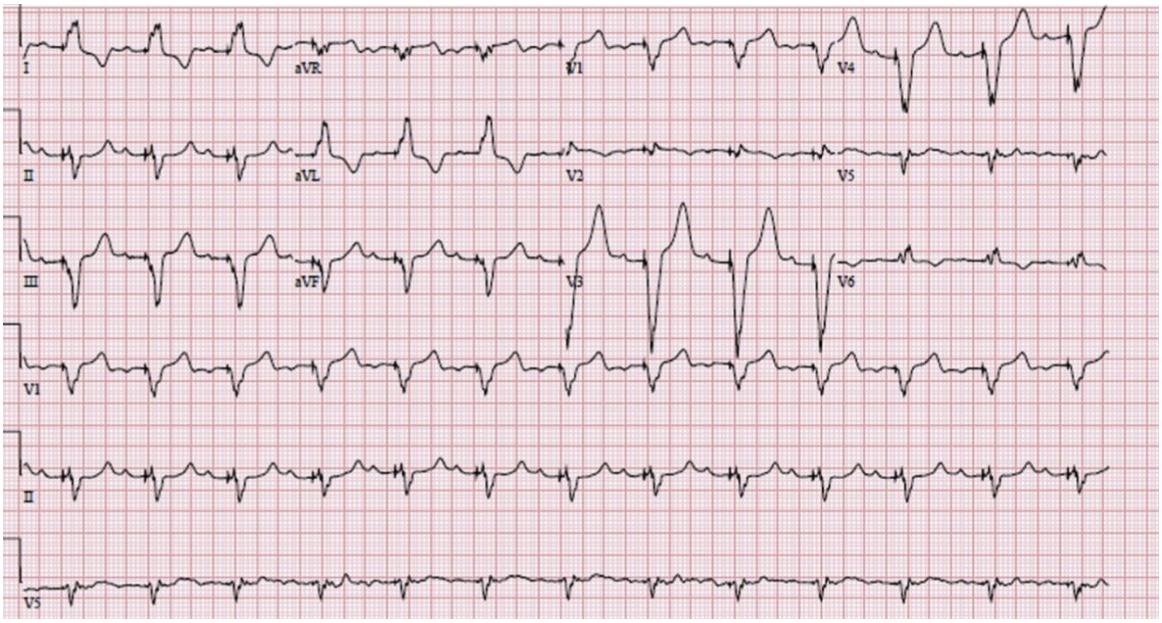


Figure 1. Preoperative EKG

Left Ventricle
The left ventricular (LV) cavity is normal in size. There is normal left ventricular wall thickness. Severely reduced left ventricular systolic function. Estimated LVEF 20-24%. Severe global hypokinesis. Ultrasound enhancing agent was administered. Significant stasis and sludge (early thrombus) is noted in the LV apex; image # 74, 73). Unable to assess diastolic function due to absence of sinus rhythm.

Left Atrium
The left atrium is mildly enlarged.

Right Atrium
The right atrium is normal in size. The IVC is enlarged with reduced inspiratory collapse (RAP = 15 mmHg).

Right Ventricle
Normal right ventricular size with reduced systolic function. The tricuspid annular plane systolic excursion (TAPSE) is 1.22 cm (normal >1.7 cm).

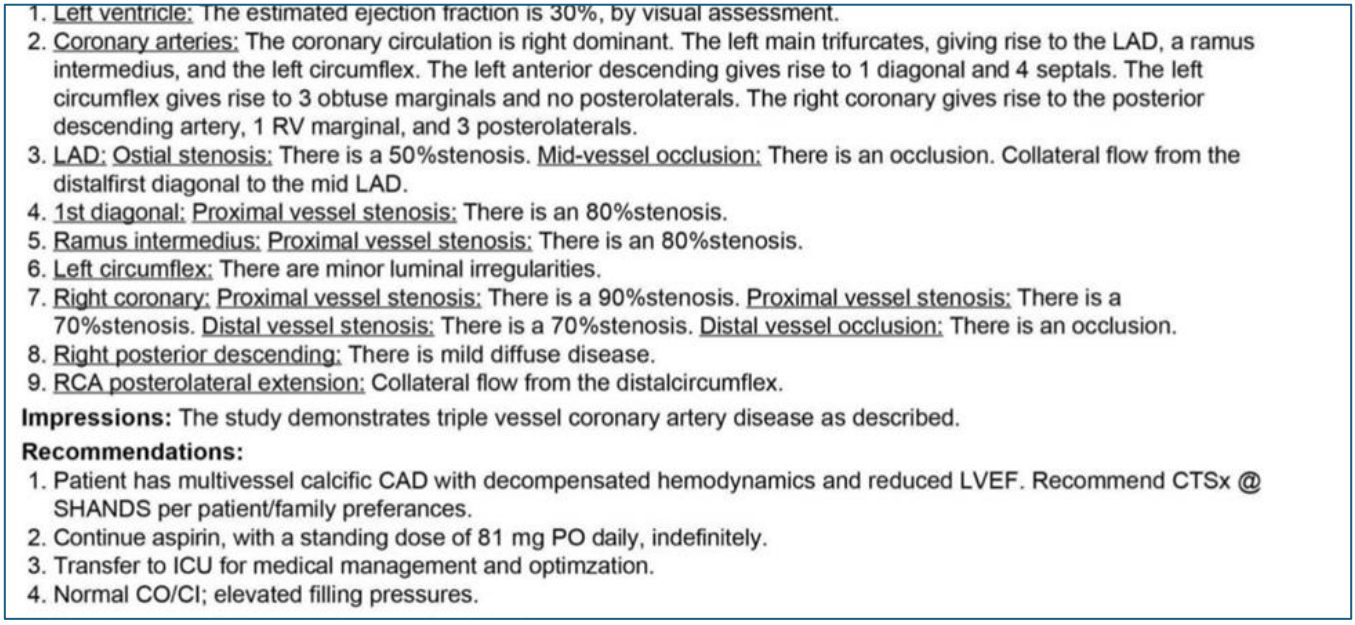
Aortic Valve
The aortic valve is tricuspid and demonstrates mild sclerocalcific changes with normal systolic mobility. There is no aortic insufficiency. No hemodynamically significant valvular aortic stenosis detected.

Mitral Valve
There is mild to moderate mitral regurgitation. No hemodynamically significant valvular mitral stenosis was detected.

Tricupid Valve
No evidence of tricuspid stenosis detected by spectral Doppler flow analysis. There is mild tricuspid regurgitation. Right ventricular systolic pressure is elevated (55-60 mmHg).

Pulmonic Valve
There is no evidence of pulmonic valve stenosis. There is mild pulmonic insufficiency.

Figure 2. Preoperative TTE



1. Left ventricle: The estimated ejection fraction is 30%, by visual assessment.
2. Coronary arteries: The coronary circulation is right dominant. The left main trifurcates, giving rise to the LAD, a ramus intermedius, and the left circumflex. The left anterior descending gives rise to 1 diagonal and 4 septals. The left circumflex gives rise to 3 obtuse marginals and no posterolaterals. The right coronary gives rise to the posterior descending artery, 1 RV marginal, and 3 posterolaterals.
3. LAD: Ostial stenosis: There is a 50%stenosis. Mid-vessel occlusion: There is an occlusion. Collateral flow from the distalfirst diagonal to the mid LAD.
4. 1st diagonal: Proximal vessel stenosis: There is an 80%stenosis.
5. Ramus intermedius: Proximal vessel stenosis: There is an 80%stenosis.
6. Left circumflex: There are minor luminal irregularities.
7. Right coronary: Proximal vessel stenosis: There is a 90%stenosis. Proximal vessel stenosis: There is a 70%stenosis. Distal vessel stenosis: There is a 70%stenosis. Distal vessel occlusion: There is an occlusion.
8. Right posterior descending: There is mild diffuse disease.
9. RCA posterolateral extension: Collateral flow from the distalcircumflex.

Impressions: The study demonstrates triple vessel coronary artery disease as described.

Recommendations:

1. Patient has multivessel calcific CAD with decompensated hemodynamics and reduced LVEF. Recommend CTSx @ SHANDS per patient/family preferances.
2. Continue aspirin, with a standing dose of 81 mg PO daily, indefinitely.
3. Transfer to ICU for medical management and optimzation.
4. Normal CO/CI; elevated filling pressures.

Figure 3. Preoperative left heart catheterization report

Question 1: What is the clinical impact of a patient with mixed cardiac pathological diseases?

Comments Dr. Peng:

The patient has multiple comorbidities including CAD, CHF, MR, afib, CIED, DM, anemia and CKD. There will be conflicts of interest in hemodynamic management of these patients in clinical settings.

The main focus for this patient is on cardiac function. Specifically, we will address the following key aspects that significantly affect cardiac performance, and each part will have its anatomy support: First, the conduction function—whether any blocks or arrhythmias are present. Other than the sinus node and AV node, Purkinje fibers that will affect the conduction function. Second, the pump functions--assessing both the systolic and diastolic functions of the ventricles. Third, how coronary perfusion impacts the patient's contractility. Finally, regarding valvulopathy—if there is any stenosis or regurgitation, the conditions will also affect cardiac function and our anesthetic management.

Question 2: How do we calculate LVEF and how does it reflect the true SV of the patient?

Comments Dr. Peng:

There are two different concepts here: stroke volume, and LVEF (left ventricular ejection fraction), which is defined as (LVEDV - LVESV) / LVEDV or SV / LVEDV. This formula emphasizes the outcome without focusing on the process. In patients with moderate to severe mitral regurgitation, the stroke volume does not enter the aorta but rather flows into the low-pressure system, the left atrium. As a result, the LVEF in such patients may appear relatively normal, but the actual LV systolic function is impaired.

Another concept is stroke volume itself. Some patients may have a very low LVEF but still appear in relatively good condition. This can occur, for example, in cases of dilated cardiomyopathy, where even with a low LVEF, an increased LVEDV allows the patient to maintain a normal SV. Conversely, in valvular diseases such as severe mitral regurgitation (MR), a significant portion of blood (e.g., 30 ml) may regurgitate into the left atrium, leaving only 30 ml for forward flow through the left ventricular outflow tract (LVOT), thus reducing the true forward SV to 30 ml. Similarly, in cases of severe aortic insufficiency (AI), part of the stroke volume (e.g., 15 ml) may flow back into the left ventricle, leaving only 15 ml to contribute to perfusion through the LVOT.

Question 3: management of patients with afib and CIEDs

Comments Dr. Huang:
This patient has coronary artery disease (CAD) and mitral regurgitation (MR). It is well known that ischemic heart disease can exacerbate MR, which in turn can reduce coronary perfusion. The patient also has atrial fibrillation (AF) and a cardiac implantable electronic device (CIED). Our team has extensive experience managing CIEDs, having done so for approximately 15 years.

Our process begins with assessing the device's pacing metrics, including the percentage of atrial and ventricular pacing. It is understood that all modern automatic implantable cardioverter-defibrillators (AICDs) incorporate pacemaker functionality. We also review the occurrence of any significant events, such as episodes of ventricular tachycardia or ventricular fibrillation.

For patients undergoing cardiac surgery, it is standard practice to deactivate the antiarrhythmic functions of the device. There are four major manufacturers of AICDs, and deactivation protocols vary slightly. Medtronic devices, for instance, require separate deactivation of ventricular fibrillation, fine ventricular fibrillation, and ventricular tachycardia functions, making them more complex to manage. Other brands are comparatively straightforward.

Once deactivation is complete, continuous cardiac electronic monitoring is essential to promptly identify any arrhythmic events. Upon entering the operating room (OR), the anti-ventricular fibrillation function is turned off. For pacing, we typically prefer atrioventricular (AV) pacing, using the DOO mode at a rate of 80-90 beats per minute to maintain adequate cardiac output. If the patient is not pacemaker-dependent, DDD mode may also be used, although most of our patients rely on pacemaker support.

Comments Dr. Zhou:
Our hospitals require electrophysiology (EP) technicians to interrogate AICDs both before and after elective surgeries for cardiac cases. Additionally, defibrillation pads are always placed on patients following the interrogation of their AICDs.

Question 4: Does the approach to treatment with a magnet differ between patients who are pacemaker-dependent and those who are not?

Comments Dr. Huang:
Different brands of CIEDs respond differently to external magnets. Generally, placing a magnet over an CIEDs will deactivate its antiarrhythmic functions. However, certain devices may be programmed by a cardiologist to not respond to magnet application. Typically, a sound indicator confirms deactivation of the antiarrhythmic function when a magnet is applied. The most reliable approach is to consult the specific device manufacturer to verify magnet responsiveness.

During cardiac surgeries, using magnet in the sterile field is usually impractical. It is important to note that for all CIEDs, applying a magnet does not interfere with the pacemaker functions; it only deactivates the antiarrhythmic features. In contrast, for basic pacemakers, applying a magnet will automatically switch the device to asynchronous pacing modes such as DOO, AOO, or VOO, depending on the number of leads, with a typical pacing rate in the 90s (bpm).

If the patient is pacemaker-dependent and the surgical procedure involves using electronic cautery, it is crucial to be aware that the pacemaker's function may be temporarily inhibited.

Comments Dr. Peng:
When managing patients with CIED, it is important to determine whether they are pacemaker dependent. For patients who are not pacemaker-dependent, a magnet can generally be used to deactivate the antiarrhythmic functions of the device. In these cases, even if electronic cautery is used during surgery, as the patient has intrinsic heart rhythm, the heart function will not be affected.

However, if the patient is pacemaker-dependent, the use of electronic cautery can inhibit the pacing function of the CIEDs. Therefore, it is necessary to interrogate the CIEDs prior to surgery. This process typically involves switching the device to an asynchronous pacing mode and deactivating the antiarrhythmic functions.

Question 5: Since the patient has coronary artery disease, can we consider balloon dilation or stenting first?

Comments Dr. Huang:
The patient has multivessel coronary artery disease that will ultimately require surgical intervention. These patients are often critically ill, making balloon dilation or stenting in the catheterization lab unsafe. Balloon dilation can obstruct blood flow through the coronary artery, potentially leading to acute ischemia and cardiac arrest. For patients with severe cardiac conditions who are not suitable candidates for surgery, mechanical circulatory support such as an intra-aortic balloon pump (IABP), extracorporeal membrane oxygenation (ECMO), or other mechanical circulatory support (MCS) devices may be employed.

Comments Dr. Peng:
For patients with diabetes mellitus (DM), the condition of their coronary arteries is often compromised, and the efficacy of stent placement is typically limited. In such cases, coronary artery bypass grafting (CABG) is usually the preferred treatment option.

Comments Dr. E Wang:
This patient not only has multivessel coronary artery disease (CAD) but also mitral regurgitation (MR). Since the patient will undergo surgery, the MR will also be addressed. However, it is essential to have a thorough discussion with the surgical team regarding whether to proceed with immediate repair or replacement of the mitral valve. Consideration must be given to their comfort level in performing both a multivessel bypass and mitral valve repair during the same procedure, as this may prolong cardiopulmonary bypass (CPB) time and introduce additional risks. Additionally, in some cases, MR may not be clinically significant and could improve once the ischemic condition of the heart is addressed and left ventricular remodeling occurs.

Question 6: If a patient with CIEDs goes to endoscopy, will endoscopy electrocautery be safe?

Comments Dr. Huang:
When a CIED is positioned above the umbilicus, it is advisable to consider device interrogation. If the CIED is located below the umbilicus, interrogation is typically not

necessary. For endoscopic procedures, interrogation is usually not performed. However, it is prudent to have a magnet available in the room as a precautionary measure in case of an emergency.

Comments Dr. Peng:
For patients with CIEDs undergoing endoscopies, if the GI doctors do not use electrocautery, we do not need to interrogate CIEDs.

Question 7: What is the ultimate cause of cardiac ischemia?

Comments Dr. Huang:

Endocardial and epicardial muscle perfusion during the cardiac cycle differs significantly. In patients with uncontrolled hypertension and left ventricular hypertrophy (LVH), endocardial wall perfusion is often inadequate. Coronary artery disease (CAD) can present in various forms, such as obstruction at the ostia, lesions in the mid-portion of the coronary arteries, or diffuse disease. This patient, who has diabetes mellitus (DM), exhibits diffuse CAD. Coronary perfusion pressure (CPP) is determined by the difference between diastolic blood pressure (DBP) and left ventricular end-diastolic pressure (LVEDP). The myocardium is primarily perfused during diastole, so maintaining an adequate DBP is crucial.

For patients with both mitral regurgitation (MR) and CAD, hemodynamic management presents a challenge. In CAD, the goal is typically to maintain a low heart rate and high blood pressure, while in MR, the focus is on achieving a higher heart rate and lower pulmonary vascular resistance (PVR). Balancing these conflicting needs is difficult. Additionally, when LVEDP is elevated, CPP decreases. Conditions such as aortic insufficiency (AI) or MR can exacerbate this by increasing LVEDP. A strategy to optimize myocardial oxygen supply involves reducing LVEDP and increasing DBP.

In terms of demand, heart rate (HR) is a critical factor. This patient, who has atrial fibrillation (Afib) and an implanted cardioverter-defibrillator (AICD), makes it unrealistic to maintain a fixed HR. Continuous monitoring of the patient's hemodynamic status, along with regular assessment for ischemic events using transesophageal echocardiography (TEE) and electrocardiogram (EKG), is essential to guide management.

Comments Dr. Peng:
Myocardial ischemia, resulting from a demand-supply mismatch, occurs when the heart muscle does not receive sufficient oxygen due to an imbalance between the oxygen demand of the myocardium and the oxygen supply delivered through blood flow. This imbalance causes the heart to work harder than the blood supply can support.

Heart rate (HR) plays a crucial role in this process, as it not only increases myocardial oxygen demand but also reduces oxygen supply. In patients with coronary artery disease (CAD), the use of beta-blockers is typically recommended to manage this condition. Left ventricular end-diastolic pressure (LVEDP) also significantly influences both oxygen demand and supply. Elevated LVEDP increases wall tension, thereby raising oxygen demand. Furthermore, as LVEDP rises, coronary perfusion pressure (CPP) decreases (CPP = DBP - LVEDP), further compromising oxygen supply to the myocardium. Therefore, both HR and LVEDP are critical factors that affect the myocardial oxygen demand and supply balance.

Question 8: What is the differential diagnosis of respiratory distress?

Comments Dr. Li:
Consider whether this is cardiogenic or pulmonary origin or for other reasons. CHF exacerbation leads to cardiogenic pulmonary edema or pleural effusion. Other differentials include asthma, COPD, pneumonia, pneumothorax, acute respiratory distress syndrome (ARDS), aspiration pneumonia, bronchitis, atelectasis, and anxiety-related respiratory distress.

Comments Dr. Peng:
We will evaluate whether the respiratory distress in this patient is cardiac or pulmonary in origin. The TEE findings indicate significant pleural effusions on both sides. Given the patient's history of CAD and mitral regurgitation, it is most likely that the respiratory distress is secondary to heart failure.

Question 9: What are the strategic approaches in the management of hemodynamic goals when patients have complex diseases and conflicts of interest?

Comments Dr. Peng:
We will establish invasive monitoring, including blood pressure, CVP, and PA pressures, so we will place an arterial line, CVP line, and PA catheter. We will monitor anesthetic cerebral perfusion with cerebral oximetry and anesthetic depth with BIS monitor. Defibrillation pads will be placed for the entire procedure. We will have vasopressors such as epinephrine, norepinephrine, and other vasoactive medications like milrinone and nitroglycerin ready. Antifibrinolytics, including aminocaproic acid or tranexamic acid, will be administered, along with insulin to manage hyperglycemia during the surgery.

Question 10: What is the important approach in treating CAD patients with compromised ventricular functions?

Comments Dr. Zhou:
When assessing the patient, I will review baseline hemodynamic parameters and overall perfusion status. This patient's systolic blood pressure (SBP) typically remains below 150-160 mmHg, maintaining a relatively low level. My objective is to preserve baseline blood pressure during induction. In cases where PA catheter monitoring is not available and PA pressure is unknown, I will take measures to avoid conditions that could elevate CO2 levels, which may exacerbate pulmonary vascular resistance (PVR). For instance, respiratory hypoventilation prior to induction can significantly worsen PVR and increase PA pressure, heightening the risk of right ventricular (RV) failure—particularly critical given this patient's 90% RCA stenosis. I will ensure a smooth induction, avoiding factors that may trigger sympathetic stimulation. I will also instruct residents and fellows to maintain hemodynamic stability comparable to the patient's preoperative state. Once PA catheterization and TEE monitoring are in place, we will proceed to the subsequent steps.

Comments Dr. Peng:
For patients with CAD, they are very vulnerable to non-sinus rhythm, tachycardia and hypotension. First, for non-sinus rhythm, we know that the diastole includes isovolumic relaxation, rapid filling, diastasis and atrial systole. For a normal patient, the LA contraction only contributes 20-25% of the LV volume of diastole, when patient LVEDP increases like CHF patient, the LA contraction contributes more during LV filling. And can contribute as high as 40%, when a patient has afib, the LA contraction is diminished. So, for patients with elevated LVEDP, atrial kick is essential for LV filling. Secondly, tachycardia increases oxygen consumption, decreases diastolic phase, reduces coronary perfusion pressure and also decreases diastolic time and reduces LV filling. Patients with coronary artery disease (CAD) are sensitive to low blood pressure because narrowed coronary arteries reduce blood flow, leading to ischemia. The right ventricle (RV) is perfused during both systole and diastole, while the left ventricle (LV) is perfused predominately during diastole. Coronary perfusion pressure (CPP) is calculated as diastolic blood pressure (DBP) minus left ventricular end-diastolic pressure (LVEDP). In CAD patients with heart failure, elevated LVEDP reduces CPP, especially during low blood pressure. Tachycardia worsens this by shortening the time for diastolic filling, increasing the risk of ischemia. To manage CAD patients, it's important to maintain a normal heart rhythm, a slower heart rate, sufficient preload, and adequate afterload. Maintaining a higher afterload helps preserve CPP and heart function, a key but often overlooked principle in treating these patients.

Comments Dr. E Wang:

In patients with mitral regurgitation (MR), a significant amount of blood flows back into the left atrium. To maintain adequate cardiac output (CO), which is the product of heart rate (HR) and stroke volume (SV), it is important to keep the heart rate at an appropriate level. Additionally, maintaining adequate preload ensures sufficient stroke volume, while reducing afterload helps to minimize the regurgitant volume.

I believe we should avoid overemphasizing high afterload. In patients with mitral regurgitation (MR), the use of propofol, which decreases afterload, can be beneficial. For this specific patient, I did not address heart rate (HR) because they are pacemaker-dependent, and HR cannot be controlled. Regarding preload, we will ensure the patient is adequately volume-resuscitated. Given their acute exacerbation of congestive heart failure (CHF), recent diuresis, and NPO status, I plan to replenish volume as needed. To support inotropic function, I will initiate a low-dose epinephrine infusion. Additionally, I will aim to maintain the patient's blood pressure close to their baseline, as coronary perfusion pressure (CPP = DBP - LVEDP) must remain stable.

Comments Dr. Peng:
The choice of anesthetic medication is less critical than how it is administered. While some argue that propofol should be avoided in certain situations and etomidate is the only option, this is not always the case. These patients are often critically ill, and I emphasize to my residents and fellows the importance of being patient and attentive to the patient's needs. In such cases, I typically initiate a low-dose infusion of epinephrine or norepinephrine before induction to counteract the vasodilatory effects of the anesthetic agents.

Question 11: How to evaluate MV regurgitation?

Comments Dr. E Wang:
To thoroughly evaluate mitral regurgitation (MR) using transesophageal echocardiography (TEE), we recommend the following approach:

1. Comprehensive Imaging:

- Use the mid-esophageal 5-chamber view to assess the A1/P1 segments.
- Apply the mid-esophageal 4-chamber view to evaluate A2/P2.
- Utilize the lower transesophageal 4-chamber view to inspect A3/P3.
- Perform the mid-esophageal 2-chamber view to review P3/A3, A2, and A1.

- Include the mid-esophageal long-axis view for A2/P2 assessment.

- Add the transgastric basal short-axis view to visualize A3, A2, A1, and P3, P2, P1.

2. Severity Classification:
- Assess MR severity using parameters such as vena contracta (VC), regurgitant volume (RV), regurgitant fraction (RF), pulmonary vein systolic flow reversal, regurgitation area, and left atrial dilation. Note that MR severity may appear reduced under general anesthesia.

3. Mechanism Classification:
- Use the Carpentier classification to categorize MR mechanisms based on leaflet motion and annular diameter changes.

4. Advanced Assessment:
- Perform 3D and 4D imaging of the mitral valve from both left atrial and left ventricular perspectives.
- Leverage emerging technologies for enhanced mitral valve evaluation.

This structured approach ensures a detailed analysis of MR, incorporating established and advanced imaging techniques.

Questions 12: How to decide MV repair versus replacement?

Comments Dr. E Wang
A thorough evaluation of the mitral regurgitation (MR) mechanism and mitral valve (MV) anatomy is essential. This includes assessing the severity, direction, location of the regurgitant jet, and left ventricular (LV) function both qualitatively and quantitatively. Close communication with the surgical team is critical during this process.

Additionally, other valve abnormalities that may impact MR should be evaluated, such as:
Eccentric aortic insufficiency (AI) contributing to MR.
Left ventricular outflow tract obstruction (LVOTO) causing MR.
Regional wall motion abnormalities (RWMA) leading to MR.

The decision to repair or replace the mitral valve will be made collaboratively with the surgical team, ensuring the best approach for the patient.

Comments Dr. E Wang:

Commissural views of the mitral valve (MV) diameter and anterior leaflet length in the two-chamber view are valuable for helping the surgeon determine the appropriate size of the annuloplasty ring. For this patient, I recommend mitral valve repair over replacement.

Comments Dr. Peng:

A study published in *The New England Journal of Medicine* titled "Mitral-Valve Repair versus Replacement for Severe Ischemic Mitral Regurgitation" found no significant difference in left ventricular reverse remodeling or survival at 12 months between mitral valve repair and replacement. While replacement provided a more durable correction of mitral regurgitation, clinical outcomes between the two groups were similar. However, this study only evaluated outcomes over one year.

In certain cases, replacement may be emphasized, particularly in older patients (e.g., those in their 70s) who are less likely to tolerate another surgery or when the valve anatomy is unsuitable for repair. However, in most cases, mitral valve repair is preferred.

The mitral valve has a complex anatomy, unlike the aortic valve, which is simpler and lacks a supportive structure. The mitral valve apparatus includes the left atrial wall, mitral annulus, leaflets, chordae tendineae, papillary muscles, and left ventricle.

According to the Carpentier classification:

- Type I (normal leaflet motion) may not respond well to repair.
- Type II (excessive leaflet motion, such as in prolapse) is highly suitable for repair.
- Type III (restricted leaflet motion, often due to ischemic tethering) can also benefit significantly from repair in certain scenarios.

This highlights the importance of tailoring the surgical approach to the specific anatomy and pathology of the mitral valve. When evaluating MV with TEE we can follow the four steps A, B, C, D. A is anatomy and annulus. B is basal maps and boundary, C is commissure and coaptation, D is defect and diagnosis.

Question 13: How to choose the annulus size?

Comments Dr. Peng:
One method to assess the mitral valve (MV) annulus size is by checking the intratrigonal distance. In the commissural view, rotate the probe to the right side. You will observe a curve

where the anterior mitral valve (MV) connects to the aortic valve (AV) annulus. This curve represents the intratrigonal distance and helps determine the MV annulus size. Another approach is measuring the anterior MV length in the MV long-axis view. This measurement corresponds to the A2 segment, the longest part of the anterior MV. Lastly, the aortic annulus size can be measured and divided by 0.8 to help guide the selection of the appropriate MV annulus size.

Question 14: How to evaluate the success MVR

Comments Dr. E Wang:
First, we will maintain the patient's hemodynamics at baseline before proceeding with evaluation. If the mitral regurgitation (MR) is more than moderate, we will return to bypass to redo the MV repair. Similarly, if there is mitral valve stenosis, we will go back to bypass to correct it. If a mitral valve replacement is performed, we will assess the gradient across the valve and check for any perivalvular leaks.

Comments Dr. Peng:
For mitral valve replacement, we should assess four aspects: any leaflet motion, mitral regurgitation (MR), perivalvular leaks, and the transmitral valve gradient. This video demonstrates severe MR after MV replacement, which is caused by the LV venting catheter remaining in the left ventricle. We should re-evaluate once the surgeon removes the LV venting catheter.

Question 15: How to avoid the increase in pulmonary artery pressure and acute RV failure?

Comments Dr. Sheng Wang:
In many hospitals in China, the value of the PA catheter is often underestimated. However, it provides continuous measurements of heart parameters and valuable information. I strongly recommend using a pulmonary artery catheter (PAC) to assist and guide our cardiac anesthesia management.

Comments Dr. Zhou:
For this patient, I would maintain stable systemic blood pressure and slightly hyperventilate to prevent CO_2 retention. At the same time, I would choose vasoactive medications to reduce pulmonary vascular resistance (PVR) and avoid overloading the right ventricle.

Comments Dr. Peng:
We should avoid factors that can increase pulmonary vascular resistance (PVR). Pulmonary arterial hypertension (PAH) is dangerous, but right ventricular failure (RVF) is even more critical. This image shows that when the patient doesn't have RVF, PA pressure remains normal. However, when PVR becomes excessive and the right ventricle decompensates, RVF cannot generate adequate PA pressure, causing a drop in PA pressure. At this point, there will be significant tricuspid regurgitation (TR).

Question 16: RV failure treatment during surgery?

Comments Dr. Sheng Wang:
There are limited medications for treating right ventricular (RV) failure. For example, epinephrine, when used at the appropriate dose, can help improve RV function. Phosphodiesterase (PDE) inhibitors are also a potential option. Levosimendan, approved by NEJM in 2019, does not specifically treat heart failure but still has clinical value, and some clinicians continue to use it. Post-CRRT (continuous renal replacement therapy) can be beneficial for RV function by helping to restore a negative volume status in the patient. Recovery of RV function takes time and requires patience.

Comments Dr. Peng:
Right ventricular (RV) failure can result from two conditions: volume overload and pressure overload. Pressure overload includes causes such as pulmonary embolism, ARDS, acute decompensated pulmonary hypertension, lung disease exacerbation, and hypoxia. Volume overload can be due to RV ischemia, arrhythmias, allergic reactions, and pericardial drainage syndrome. Milrinone is beneficial in managing RV failure. It works by improving RV function through increased contractility, reduced pulmonary vascular resistance (PVR), and enhanced cardiac output. A common side effect is the reduction in PVR, and it is often used in combination with norepinephrine.

Comments Dr. Huang:
I typically use epinephrine, milrinone, and vasopressin to support afterload. It’s important not to delay the use of mechanical circulatory support, such as ECMO, Impella, or Protek Duo. For example, in RV ECMO, one catheter is placed in the right atrium (RA), with the outflow catheter also positioned in the RA.

Comments Dr. Zhou:

I also use milrinone with epinephrine, but I avoid using norepinephrine at this time, as it can increase the patient's PVR. I may also administer inhaled medications, such as nitric oxide, to reduce PVR. I agree that it's important not to delay initiating mechanical circulatory support (MCS), as there are many options available to assist us.

Comments Dr. Huang:
I believe CRRT is beneficial for patients with volume overload, but for volume-depleted patients, it may worsen kidney function. We aim to maintain a CVP of 10-12 for our patients. I do not know if RVF is an indication for CRRT, I will check with my ICU colleges.

Question 17: What is the best pacing mode in the operating room?

Comment Dr. Huang:
I generally recommend using both atrial and biventricular leads. If only the RV lead is used, conduction delay may worsen mitral regurgitation (MR). In the operating room, we use AV sequential pacing in DOO mode, but this can be affected by the surgeon's electronic cautery. After leaving the OR, we switch the patient back to DDD mode to prevent R on T.

Question 18: How to select the mechanical circulatory support device (MCS) when a patient with a failing heart is unresponsive to escalating dose of vasoactive medications?

Comments Dr Zhou:
We rarely use the Impella RP in our practice. Typically, we initiate right-sided ECMO for the first 24 to 48 hours. If the left ventricular function is poor, we escalate to full systemic VA ECMO. Additionally, I use inhaled nitric oxide (iNO) to reduce pulmonary vascular resistance (PVR), support right ventricular (RV) contractility, maintain appropriate preload, and temporarily deploy right-sided ECMO while keeping the chest open for 24 to 48 hours.

Comments Dr. Huang:
We frequently use the Protek Duo in our practice. In most cases, right ventricular failure (RVF) results from left ventricular (LV) failure, and LV support, such as VA ECMO, often improves RV function. For isolated RV failure, we prefer to initiate right-sided ECMO, although some surgeons opt for the Protek Duo or the Impella RP.

Comments Dr. Zhou:

When managing mechanical circulatory support (MCS), it is important to determine whether right ventricular (RV) failure is due to increased pulmonary vascular resistance (PVR) or RV contractility issues, such as ischemia or acute intraoperative failure. For RV failure related to COPD, the Impella RP may provide benefits. However, chronic RV failure resulting from long-term pulmonary hypertension poses a greater challenge. Right-side ECMO with left-side IABP will be helpful with RV failure.

Question 19: If the medication is maximized for the treatment of left heart failure, what MCS do you choose?

Comments Dr. Zhou:
The intra-aortic balloon pump (IABP) is our first choice as it supports the left ventricle (LV) but requires some preserved ejection fraction. If the left ventricular ejection fraction (LVEF) is extremely low, around 5–10%, we opt for ECMO. Using only the Impella is insufficient, as right ventricular (RV) failure often follows if the LV fails.

Question 20: Why will IABP help with LV failure?

Comments Dr. Peng:
The intra-aortic balloon pump (IABP) supports left ventricular (LV) failure by improving coronary perfusion and reducing afterload. Improved Coronary Perfusion: The IABP inflates during diastole (when the heart is relaxing), increasing blood flow to the coronary arteries. This enhanced perfusion supports the ischemic myocardium, improving oxygen delivery and function. Reduced afterload During systole (when the heart contracts), the IABP deflates rapidly, creating a vacuum-like effect. This reduces the resistance (afterload) the LV must overcome to eject blood, decreasing myocardial oxygen demand and improving cardiac output. Decreased Myocardial Workload: By lowering afterload and improving coronary blood flow, the IABP decreases the stress and oxygen requirements of the struggling LV, helping it recover or function more efficiently.

钱秋冰医生作品

ASA news release

曲歌医生整理

October 20, 2024

Ibuprofen and Other NSAIDs May Reduce the Risk of Postoperative Delirium

Postoperative delirium can greatly affect recovery by increasing healthcare costs, extending hospital stays, and raising the likelihood of severe consequences, including cognitive decline, dementia, decreased physical function, transfer to a long-term care facility, and even death.

In a study presented at the ANESTHESIOLOGY® 2024 annual meeting, Dr. Steven M. Frank and his colleagues examined a large medical records database to identify patients who underwent surgery with anesthesia from 2014 to 2023. The researchers categorized patients by age (18-64 and 65 or older) and by the type of medication they received: acetaminophen only, salicylate NSAIDs (such as aspirin) only, and non-salicylate NSAIDs (like ibuprofen, ketorolac, or celecoxib) only. They then compared the rates of delirium experienced within a week following surgery. The medications were administered either orally or intravenously on the day of the surgery, before or during the operation. In both age groups, non-salicylate NSAIDs were associated with a reduced risk of delirium compared to acetaminophen and salicylate NSAIDs.

For the younger group (ages 18 to 64), which included 243,216 patients, those receiving non-salicylate NSAIDs had a 22% lower risk of postoperative delirium compared to those taking acetaminophen and a 70% lower risk compared to those taking salicylate NSAIDs.

For the older group (age 65 and above), consisting of 97,090 patients, non-salicylate NSAIDs were linked to a 33% lower risk of delirium compared to acetaminophen and a 45% lower risk compared to salicylate NSAIDs.

It is noteworthy that all NSAIDs can cause side effects, such as nausea and vomiting, kidney impairment, and an increased chance of bleeding or excessive clotting during surgery, which might outweigh their benefits for patients at lower risk for postoperative delirium, particularly younger individuals. Hence, it is essential to evaluate a patient's overall health and risk factors before using NSAIDs to mitigate postoperative delirium, he added.

October 19, 2024

Prolonged Fasting for Multiple Orthopedic Surgeries Raises Risk of Malnutrition, Leading to Worse Outcomes

People who have multiple orthopedic surgeries during the same hospital stay are more likely to suffer malnutrition due to repeated or prolonged fasting, which can slow recovery and increase the risk of death, according to a study of more than 28 million patients presented at the ANESTHESIOLOGY® 2024 annual meeting by Dr. George Williams' team at UT Houston.

For the study, researchers analyzed the National Inpatient Sample database between 2016 and 2019. They identified 28,475,485 patients who had orthopedic surgery of any type in the hospital, 1,853,360 (6.5%) of whom were diagnosed with malnutrition after admission. Patients were grouped based on the number of surgeries they had, all of which were performed during a single hospitalization. Patients who were diagnosed with malnutrition had an average of 2.31 surgeries, while those who were not malnourished had an average of 1.57 surgeries. Researchers found malnourished patients were at least 15% more likely to die (and the risk increased with more surgeries), had higher hospital costs (an average of $98,000 vs. $48,000), and had longer hospital stays (an average of 9.07 days vs. 4.34 days).

The cause of death in malnourished patients typically was related to infection, complications from poor wound healing or general frailty exacerbated by malnutrition.

To prevent malnutrition, researchers suggest that patients undergoing multiple surgeries receive personalized nutritional support during their hospital stay. This support may include dietary assessments by dietitians, nutritional supplementation, and monitoring nutritional status to help facilitate faster recovery and reduce complications.

CASA News

蒋天宇医生报道

新基金会会员

杨蕾医生

本科学位：2010 年毕业于湘雅医学院麻醉专业。
工作经历：本科毕业后在西安市第一医院工作两年，并考取了麻醉医师资格证。
麻醉硕士学位：第四军医大学西京医院，导师陈绍洋教授。
麻醉博士学位：上海交通大学瑞金医院，导师于布为教授。

博士期间，获得奖学金在 MGH 麻醉科进行了两年动物实验研究，导师谢仲淙教授。博士毕业后，在 Tufts 麻醉科从事临床研究，导师 Dr. Cobey。2023 年，在马萨诸塞州西部完成一年 surgery internship，目前在 UPMC 做 regional anesthesia fellowship。

Congratulations!

- 祝贺 CASA 秘书长麻浩波医生在 2024 气道大会上获奖
- 祝贺黄佳鹏教授荣获 2024 Outstanding Research in Basic & Applied Science Award
- Congratulation to Dr. Shiqian Shen for Being the Recipient of the 2024 Jame E Cottrell, M.D., Presidential Scholar Award

Award for scientific papers published in CASA Bulletin in 2024

First Place

Comparison of Analgesic Efficacy of Continuous Erector Spinae Plane Block and Quadratus Lumborum Block in Open Abdominal Surgeries: A Retrospective Study
Emily Peng, BS (Medical school student), Josh Yuan, MD (Resident), Wana Mathieu, MD (Resident), Nirav Patil, MBBS, MPH, Mart Andrew Maravillas, MS, Xueqin Ding, MD, PhD (Associate Professor)

Second Place

Carcinoid Tumor and Anesthesia
Ning Miao, MD, Xiaowei Lu, MD, Andrew Mannes, MD

Third Place

How To Deal with A Patient Who Has Taken A GLP-1 Receptor Agonist Undergoing Upper Endoscopy Procedure: Cancel or Proceed?
Juan Li, MD， Yong G Peng, MD, PhD, FASA, FASE

低体重新生儿先天性膈疝胸腔镜手术的麻醉管理
章艳君, 天津儿童医院

Meeting report

2024 年 ASA 会议报道

陈轶男医生报道

金秋 10 月，美国麻醉医师协会（ASA）年会在费城隆重召开。美国华人麻醉医学会（CASA）携手中华医学会麻醉学分会（CSA）和国际华人麻醉学会（ICCA）给本次大会添上了色彩浓重的一笔。作为东道主的宾大麻醉与重症医学系的各位医生更是尽地主之谊，为 CASA 会员们组织了丰富多彩的学术交流和娱乐活动。

在 ASA 大会上，CASA 会员们全方位出击，大放异彩。李金蕾、汪红、孙蕾和许廉军博士作为指导讲师，带领了多个外周/中枢轴神经阻滞和 POCUS 的 workshop。麻浩波、李金蕾、黄建宏、梁小民、蒋延东、邱玥、谢征、张艺漯博士在围手术期谵妄、门诊手术中心疼痛管理、儿科麻醉、神经外科麻醉、神经内分泌肿瘤、气道管理和肠道菌群等各个热点话题或发表主题发言，或领导困难病例讨论，在 ASA 大会上展现了华人麻醉医生在临床和科研上的强劲实力。现就职于麻省总院的沈世乾医生更是作为临床医师-科学家的卓越代表，获得了 2024 年 ASA James E. Cottrell 主席奖！

在线下，CASA 和 ICAA 围绕着围手术期疼痛管理开展了圆桌会议和学术研讨会。在圆桌会议上，中美两国麻醉界领军人物在刘仁玉博士的主持下，对两国阿片类药物的使用现状、挑战和未来发展的前景进行了热烈的交流和讨论，与会专家对中美学术合作表达了期待和信心。在学术研讨会上，专家们分别在各自的研究领域介绍了与围手术期疼痛管理和病人转归相关的内容，让与会者受益匪浅。

ASA 年会不仅仅是学术交流的盛会，更是新朋老友相聚的好时光。高尔夫球场、射击场、匹克球场上都留下了 CASA 会员们的欢声笑语。与往年一样，CASA 的重头戏年度晚宴在 2024 年 10 月 19 日隆重登场。CASA 现任主席李金蕾博士对过去一年中 CASA 的工作进行了总结汇报，并给做出杰出贡献的会员颁发了奖状奖牌。与会嘉宾有 ASA 现任主席 Dr. Ronald Harter，ASA 前任主席 Dr. Michael Champeau，CAA 主席缪长虹教授，ASRA 主席 Dr. David Provenzano，ICAA 主席夏云博士，CAA 前任会长姚尚龙教授，MDACC 麻醉学/重症医学疼痛学系主任 Dr. TJ Gan，Cleveland Clinic 麻醉学系著名专家 Dr. Daniel Sessler（排名不分先后）。CASA 会员们和来自中美两国的朋友们在享受美酒佳肴的同时，也定下来了来年在圣安东尼奥再相聚的约定。


美國華人麻醉醫學會(CASA
Chinese American Society of Anesthesiolo


CASA
Founded 2003
麻醉医学


LIFE TIME
PICKLEBALL

Regional Anesthesia and Analgesia 2024 Workshop at the University Clinical Center of the Republic of Srpska

By Dr Suzana Šobot- Novaković – University Clinical Center Banja

Luka Dr Vladimir Banović – Univeristy Clinical Center Banja Luka

The recent Regional Anesthesia and Analgesia Workshop held at the University Clinical Center of the Republic of Srpska was a resounding success, thanks to the collaborative efforts of the Clinic of Anesthesia and Intensive Therapy and the Chinese American Society of Anesthesiology (CASA). Featuring esteemed lecturers from prominent institutions in the United States, the workshop offered invaluable insights and practical training for both attendings and residents.

The event started with a press conference, setting an anticipatory tone for the day. There were 25 participants including attendings and residents. The first part of the workshop comprised a series of lectures that explored contemporary trends and pressing topics in regional anesthesia and analgesia. Highlights included:

1. Regional Anesthesia for Minimally Invasive Heart Surgery: Opportunities and Challenges

Professor Yong G. Peng from the Medical School at Florida University presented a compelling lecture on the potential and challenges of employing regional anesthesia techniques in minimally invasive cardiac procedures, highlighting both patient benefits and technical hurdles.

2. Opioid-Free Analgesia for Spine Surgery: Is It Possible?

Professor Jeff Xu from New York Medical College explored the feasibility of opioid-free pain management in spine surgeries. His insights emphasized the importance of multimodal analgesia and the future of pain management in reducing opioid dependency.

3. The Role of Regional Anesthesia in Ambulatory Total Joint Arthroplasty

Professor Jinlei Li from Yale University discussed how regional anesthesia can enhance recovery in outpatient joint replacement surgeries. His lecture focused on improving postoperative outcomes and patient satisfaction.

4. Obstetric Anesthesia and Analgesia: Challenges and Solutions

Professor Jingping Wang from Boston addressed the complexities of providing effective anesthetic care during childbirth, proposing innovative solutions to common challenges faced in obstetric anesthesia.

5. Common Pediatric Blocks

Professor John Wei Zhong from the Children's Medical Center of Dallas shared valuable techniques for performing regional blocks in pediatric patients, emphasizing safety and efficacy in this vulnerable population.

6. Private Practice Insights

Finally, Professor Ruoxu You from Overlook Medical Center provided a unique perspective on the anesthesia practice in a private setting, discussing the integration of regional techniques and the management of patient care in a more personalized environment.

The second part of the local anesthesia and analgesia workshop focused on hands-on training for various nerve blocks. Participants who were divided into five groups gained practical experience with upper and lower extremity blocks, truncal blocks, and central neuraxial blocks. The session also included specialized training on common pediatric blocks, enhancing skills for managing pain in younger patients. Additionally, the use of Point of Care Ultrasound (POCUS) for improving block accuracy was highlighted, providing attendees with valuable techniques to enhance their practice. This comprehensive workshop aimed to deepen understanding and proficiency in regional anesthesia, ultimately improving patient care.

The workshop not only provided valuable insights and hands-on experience but also culminated in a significant achievement for our residents. Following the workshop, one of our residents performed an infraclavicular block for the first time in our hospital—and it was a resounding success!

Feedback from participants was overwhelmingly positive, with many expressing gratitude for the opportunity to learn from such distinguished professionals. The workshop not only enhanced their understanding of advanced anesthesia techniques but also fostered a sense of community among practitioners.

Overall, this workshop exemplified a commitment to advancing the field of anesthesia and provided a platform for knowledge exchange that will undoubtedly benefit patient care in the region. The expertise shared by the American faculty, coupled with the interactive training, made it a significant milestone for medical professionals in the Republic of Srpska.

2024 尼泊尔之行

王景平医生

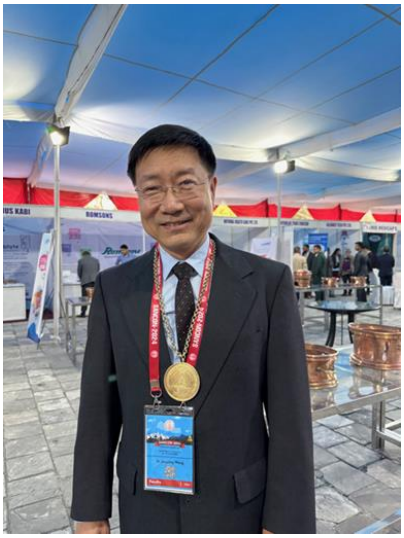
2024 年 3 月，应 CASA（美国华人麻醉学会）和 ASA（美国麻醉学会）之托，我有幸前往尼泊尔参加其麻醉年会，并为当地的麻醉学专业人员提供讲座和组织了产科麻醉模拟演练的培训。这次尼泊尔之行，不仅让我体验了与世界各地同行的交流，也让我亲眼见证了尼泊尔在麻醉学领域的挑战与进步。

出发与到达

我的行程从波士顿出发，途经多哈，再飞往加德满都。尽管在多哈机场由于机械故障航班被取消，导致行程延误，最终整整经历了 28 小时的飞行才顺利到达加德满都。不过，我的到达并不顺利，时差困扰让我几乎一到达酒店便昏睡过去。为了安全起见，入住了加德满都最好的凯悦酒店，酒店的环境与外界的差异让我印象深刻，周围的安全措施非常严密，外面是围墙和铁丝网，然而酒店内部却一派宁静与豪华。这个城市的巨大反差，成为我到达后的第一印象。

会议与交流

2024 年 3 月 29 日，尼泊尔麻醉年会正式拉开帷幕。会议现场氛围非常热烈，我有机会与尼泊尔麻醉协会的前任会长以及现任会长合影并交流。会议期间，我还特地佩戴了会长的金牌，这枚金牌已在尼泊尔麻醉学会传承了 23 年。会议中，不仅有来自世界各地的专家分享学术成果，现场也充满了对麻醉学前沿技术的讨论与思考。这个学术盛会展示了尼泊尔麻醉学领域的学术水平，也让我深刻感受到麻醉学科在全球范围内不断发展的步伐。



在大会入口处，我看到一个非常独特的景象。大会牌子前面的地面上有一个醒目独特的绘图，好像是铺设的写有“欢迎”字样的地毯，实则是用彩色面粉洒成的徽标，既美观又极具创意。这一细节展示了尼泊尔在举办会议方面的用心和创新，也让我对这次麻醉年会的热情与独特印象更深了一层。

产科麻醉模拟演练培训

除了学术交流，尼泊尔麻醉年会的亮点之一是以 CASA 名义主办并由胡灵群教授策划的主办的产科麻醉模拟演练培训。这是尼泊尔首个正式的产科麻醉模拟演练培训，我们原计划招收 24 名学员，但由于反响热烈，最终有 26 名学员参加。在这次模拟演练中，学员们从刚开始的拘谨、紧张，到

后来的自如和自信，进步显著，参与感也极高。大家热情高涨，积极互动，这也让我更加坚定了将更多国际先进的麻醉培训技术引入尼泊尔的决心。

此次的成功不仅为当地医务人员提供了宝贵的实践机会，也为尼泊尔麻醉学领域的进一步发展提供了动力。尼泊尔麻醉协会的会长以及其他相关领导都出席了开幕式并发表了讲话，表示这是尼泊尔首次举办如此高水平的产科麻醉模拟演练，且希望今后能够持续举办类似的培训活动。

此次产科麻醉模拟演练培训的成功举办离不开尼泊尔麻醉协会的支持，以及来自纽约 Mount Sinai 医院的 Mahoney 教授及同事们的积极协助。纽约 Mount Sinai 医院的专家团队在此次活动中提供了宝贵的经验和资源，帮助我们顺利开展了模拟演练，并共同致力于确保活动的高质量和学员的参与度。这种跨国合作的模式也为未来的合作与发展奠定了基础。

参观医院与合作意向

除了会议和模拟演练培训，我还参观了尼泊尔最大的一家公立医院。这家医院是以尼泊尔国王的名字命名的，尽管医院设施相对简陋，但它每年接生大约 1 万名产妇。令人遗憾的是，该医院的硬膜外麻醉使用率仅为 2%，这一数据反映出尼泊尔在麻醉学领域的普遍挑战：尽管需求巨大，但设备和技术的普及仍然滞后。在参观过程中，我与医院领导深入交流，探讨了将胡灵群教授主导的无痛分娩（NPLD）项目引入尼泊尔的可能性。我们达成了初步的合作意向，计划根据尼泊尔的具体情况，逐步实施相关的合作项目。此举不仅有助于改善当地产妇的分娩体验，也将推动尼泊尔麻醉学领域的发展。

CASA 横幅首次走出美国

在这次尼泊尔之行中，还有一个让我感到非常自豪的亮点：CASA 的横幅首次走出了美国，出现在国际麻醉学会议的现场。作为美国华人麻醉学会的一员，我深感荣幸能够代表 CASA 与世界同行们分享我们在麻醉学领域的进步与努力。CASA 的标志性横幅见证了我们美国华人麻醉学者在国际麻醉学界的影响力，也为美国华人麻醉学科在全球范围内的交流与合作打下了坚实的基础。

总结与展望

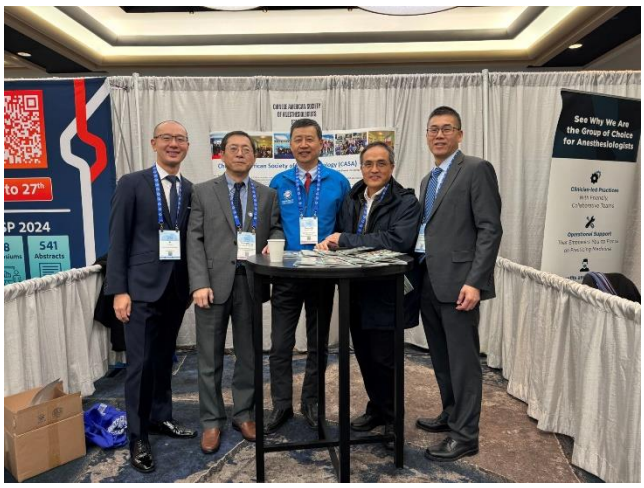
这次尼泊尔之行不仅让我在学术上受益匪浅，也让我亲身体验到尼泊尔麻醉学领域的挑战与机遇。尼泊尔在麻醉学的教育、技术和实践方面还面临许多困难，但我深信，通过国际间的合作与支持，

尼泊尔的麻醉学水平会逐步提高，更多的产妇将受益于无痛分娩等先进技术。未来，我也希望能够继续与尼泊尔的同行们保持联系，进一步推动两国麻醉学的合作发展。

我非常感谢 CASA 和 ASA 对我的支持和信任，使我能够参与到这次意义非凡的活动中。同时，也感谢尼泊尔麻醉协会及相关医疗机构的热情接待和合作，特别是来自 Mount Sinai 医院的同仁们的支持与协助。期待我们在未来的合作中，能为更多的医务人员和患者带来福音。

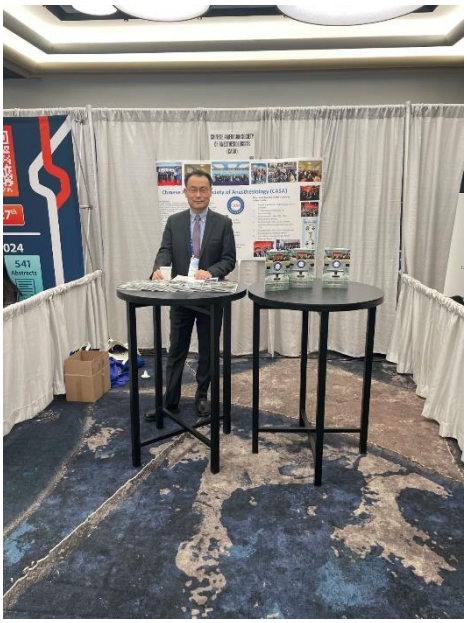
PGA CASA 聚会

2024 似乎过得比往常都要快。也许是麻醉医生的短缺，使我们的生活更加繁忙。再就是今年超乎寻常的温暖秋天，一直挽留着那五彩缤纷的秋叶，使我们在不知不觉中迈进冬季。上个周末漫步在曼哈顿，身陷在那随着红绿灯不断涌动的人潮，看着街道上那突然增加的五彩斑斓的节日彩虹， 突然意识到离 PGA 的日子已经是屈指可数……王长征




CHINESE AMERICAN SOCIETY OF ANESTHESIOLOGISTS (CASA)


CHINESE AMERICAN SOCIETY OF ANESTHESIOLOGISTS (CASA)



A Visit to the Department of Anesthesiology at the Eye & ENT Hospital of Fudan University

彭勇刚医生报道

On September 29, 2024, the members of CASA visited the Department of Anesthesiology at the Eye & ENT Hospital of Fudan University in Shanghai for an academic exchange. The delegation included the current CASA president, Jinlei Li, the former CASA president, Yonggang Peng, the current ASA president, Ronald Lee Harter, and Editor-in-Chief of Anaesthesia & Analgesia, Jaideep J. Pandit.

We started by touring the pediatric preoperative waiting area, operating room, and post-anesthesia care unit (PACU). We had the opportunity to closely observe the preoperative preparation of pediatric ENT surgery, the postoperative care and the department's standard protocol for awake flexible optical intubation in patients with difficult airway.

The director and chief of the department, Professor Wenxian Li, introduced the progress, development, and rewards of the airway management training center over the years through a series of informative educational wall posters. The posters detailed significant milestones from the inception of the training center to its current status, as well as the awards and recognitions it has garnered for excellence in education in China.

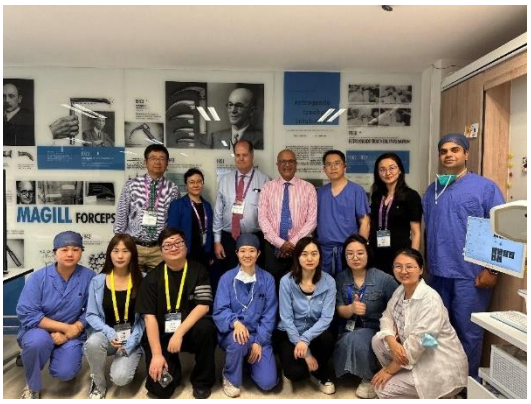
Next, they presented an overview of the evolution of airway tools on a dedicated display board. This exhibit stimulated a very enthusiastic discussion, offering a unique opportunity to review the historical advancements and modern innovations in airway management.

Furthermore, the deputy and vice chief of the department, Professor Yuan Han, introduced their innovative remote airway management training programs, which gave us a strong impression. The term provided remote hands-on training for anesthesiologists from various regions of China using affordable, shippable training models combined with an interactive real-time online meeting platform. This remote training initiative has significantly benefited anesthesiologists in more than 200 hospitals in the past four years, enhancing their airway management skills.

Subsequently, we visited their ongoing research studies, including AI-assisted technologies for airway assessment and endotracheal intubation. The project leader demonstrated the equipment and how to perform an AI-assisted endotracheal intubation through real-time feedback based on the patient's anatomy.

In the end, professor Pandit delivered an insightful lecture on writing papers related to airway management studies. His guidance will inspire the audience in improving the quality of future research publications in airway management.

During the visit, we deeply engaged in in-depth discussions on the latest developments in airway management, shared our insights on clinical practices in Eye and ENT surgeries, and explored potential opportunities for future collaboration. The visit not only strengthened the academic ties between CASA and the local anesthesia team in China, but also provided a platform for exchange of information and the promotion of mutual growth in the field of Anesthesiology.



2024 年浙江省麻醉质控交流论坛暨浙大二院广济学术周
——中美麻醉论坛圆满成功

浙江大学医学院附属第二医院 罗格、肖洁报道

9 月 25 日，2024 年浙江省麻醉质控交流论坛暨浙大二院广济学术周——中美麻醉论坛在杭州顺利召开。

今年是浙江省临床麻醉质控中心成立 35 周年，浙江大学医学院附属第二医院成立 155 周年。为了纪念这一特殊的时刻，联合美国华人麻醉医学会专家们举办此次会议。开幕式上，浙大二院麻醉手术部主任严敏教授向各位专家学者致以热烈的欢迎，并对每位专家教授进行了详细介绍。

出席会议的，包括美国华人麻醉学会的李金蕾教授、彭勇刚教授、李成付教授、王景平教授、仲巍教授，同时荣幸邀请了 Anesthesiology 主编、哈佛医学院 James Phillip Rathmell 教授、Anesthesia & Analgesia 主编、牛津大学 Jaideep J. Pandit 教授、德克萨斯大学医学中心麦戈文医学院蒋延东教授、BJA education 副主编 Sean Bennett 教授等知名学者到会。

浙江大学医学院附属第二医院党委书记、中国科学院院士王建安教授发表致辞，正式拉开大会序幕。他在致辞中表

达了希望通过此次会议，进一步提升浙大二院及全省麻醉学科的整体质量与水平.

第一部分：疼痛管理的最新进展

1.Emerging Trends in Management of Acute Pain - James P. Rathemell 教授对急性疼痛管理的最新趋势进行了讲解，涵盖最新研究成果及未来的方向。

2.区域神经阻滞在门诊手术中的应用 - 李金蕾教授分享了区域神经阻滞技术的进展，特别是其在门诊手术中的应用。

3.分娩镇痛不全的管理 - 王景平教授介绍了分娩镇痛中的挑战，尤其是如何处理镇痛不全问题。

第二部分：围术期监测和特殊手术麻醉管理

1. Ways in which Monitoring Increases the Safety of Cardiothoracic Patients - Sean Bennett 教授介绍了围术期脑功能监测在心胸麻醉中的应用。

2. 结构性心脏病的微创治疗机遇和挑战 - 彭勇刚教授分享了经导管主动脉瓣置换术（TAVR）的麻醉管理经验和挑战。

3. 后路复杂脊柱外科围术期麻醉管理 - 李成付教授通过实际病例讨论了复杂脊柱手术中的麻醉管理策略。

第三部分：研究热点、数据库建立和论文写作

1. Anesthesia or Amnesia: What Should We Target? – 蒋延东教授讨论了麻醉领域的当前研究热点及未来的发展方向。
2. 大数据时代下如何开展临床研究——美国经验有何借鉴之处 -仲巍教授介绍了美国如何建立临床大数据库及其对全球临床研究的启示。
3. How to Write a Scientific Paper: What Do Editors Look For? – Jaideep J. Pandit 教授从主编的角度讲述了科学论文写作中的要点与常见问题。

在主办及承办单位的倾力组织下，在参会专家的精心准备、鼎力支持下，各路大家齐聚一堂，会场气氛热烈友好。超豪华的明星教授阵容，共吸引了线下 100 人参加，线上超 25 万人次的点击量。

希望通过本次会议的召开，进一步推动国际麻醉安全、科学研究的发展。我们相约明年再见！

医生生活

巴尔干散记

游若旭

前记

今年十月份，随 CASA 组团去塞尔维亚（Serbia）和波黑（Bosnia and Herzegovina）学术交流。学术活动本期已有报道。主编陆医生约我从休闲旅游的角度写篇稿。她算找对人了。找对人不是因为我有文采，而是因为一行六人，其余五人都是实打实去做学术交流，来去匆匆。只我一人在完成学术交流后，自享旅游之趣。好在咱们杂志的读者都是 CASA 成员，我也不怕自曝其丑。希望拙文能为学术活动添一缕花絮，也为以后去的同仁们提供一些攻略指南。

一. 勇敢报名

早在三月份李金蕾会长在 CASA 基金会成员中招募队员去巴尔干地区学术交流，我没多想就勇敢地报了名。报名后再问细节时，心嗖的一下就凉了。这次交流的主题是 Regional Anesthesia，一起去的有李金蕾，彭勇刚，仲巍，王景平，许廉君五位医生。这五位都是大学教授，Regional Anesthesia 著书立说的大拿，而且还都是 CASA 的领导。反观自己，在非教学医院行医二十余年，不谦虚地说，专业水准七级“奴徒工匠师家圣”中稳居巧匠级，医院的外科主任和夫人做手术，都指定要我做麻醉。但要去讲课，心里打鼓。不是不会讲，是怕行家提出高质量的问题。好在金蕾会长予我点睛之笔，让我讲讲美国 Private Practice。浏览文献，准备幻灯片，仗着皮厚胆子大，算是圆满完成了任务。

二. 贝尔格莱德 （Belgrade）

我们交流的第一站是贝尔格莱德。前南斯拉夫解体后，原首都贝尔格莱德成了塞尔维亚的首都。我们六人都分乘不同航班经不同城市转机飞抵贝尔格来德。东道主安排了年轻的麻醉医生接机，个个热情周到，谦虚好学。交谈中不难感受到他们对在西欧或美国行医充满向往。住在市中心，步行十分钟就到了圣萨瓦大教堂，据说是巴尔干最大的东正教教堂，

可我后来在阿尔巴尼亚地拉那参观另一个东正教教堂，导游说他们的最大，我没有去考证。贝尔格莱德旅游资源并不丰富，我自己步行去了 Nikola Tesla 博物馆。Tesla 恐怕是历史上最有名的塞尔维亚人了，也许 Novak Djokovic 有机会超过他。博物馆陈列着他的诸多发明，比如变压器，还有他的骨灰，放在一个球形容器里，据说他认为球形是最美的形状。Tesla 虽是塞尔维亚人，但扬名立万是在美国，几乎跟 Thomas Edison 齐名，却一直被 Edison 打压。贝尔格莱德另一个打卡点是铁托墓，也就是铁托故居纪念馆。纪念馆的规模和陈列品数量，比我想象的小而少，并不像一个歌功颂德令万世敬仰的场所，不知是不是现在的人们对铁托也是毁誉参半。博物馆里有一个展柜陈列着各个国家领导人送给铁托的礼物。中国送的是一尊国宝级大师雕刻的多层象牙塔，任何人一看都知道价值不菲。美国送的是一张肯尼迪签名的大头照，够寒酸的。多瑙河贴着贝尔格莱德北面流过，当天晚饭后金蕾会长提议去多瑙河边走走，走的倒不远，正好消化东道主请我们吃的大餐。夜幕降临，会长有点遗憾，说没感觉到多瑙河的蓝色。我说你可能华尔兹跳多了。约翰斯特劳斯在维也纳创作的这首著名的圆舞曲，说不定多瑙河在那一段是蓝色的。

三. 萨拉热窝（Sarajevo）

我们交流的第二站是另一个国家波黑的第二大城市班尼卢卡（Banja Luca），在波黑西北位置，从贝尔格莱德乘坐双螺旋桨飞机飞 70 分钟就到了。当地医院特别重视这次交流，还专门请了当地电视台等媒体开了新闻发布会。我也没想到我这辈子还有机会参加新闻发布会。活动结束第二天，同行的五位医生都踏上了返美的旅程，等待他们的是要去辛苦准备几天后在费城 ASA 年会上 CASA 的活动。

班尼卢卡的 Sobot 医生帮我联系，包了一部车，300 欧元，萨拉热窝一日游，单程三个小时的路。萨拉热窝的地导也请好了，80 欧元三小时。我跟 Sobot 医生叮嘱，找导游要找一个对那部电影瓦尔特保卫萨拉热窝熟悉的，旅行社说，You are not the first one to ask for it. 对萨拉热窝的神往，源自少年时代的记忆。这部摄于 1972 年，在 1977 年于中国公映的电影，带给当时中国观众的感觉可以用震惊来形容。电影对战争残酷性的表现，因为对角色的共情化立场，让中国观众刻骨铭心。记得当时的小伙伴们，每个人都看了五六遍以上，影片中的对白，张口就来。去之前的那个晚上，我把这部电影又看了一遍。导游带我的第一站，就是影片开始和结尾都出现过的党卫军上校俯瞰整个城市的那座小山包。那一刻，我这个从不追星的中年男人有种见到某位偶像的感觉，挑灯熬夜准备讲座幻灯片的付出都值了！ 随后的两个多小时，导游把电影中的重要取景点都带我走了一遍，瓦尔特射杀德国鬼子的钟楼，钟表匠女儿牺牲的街道，电影中协助瓦尔特甩掉敌兵追捕的铜匠父子，他们的匠三代还经营着那家铜匠铺。我还专门进去和他合了影，买了一套咖啡壶。除了那部电影，萨拉热窝本身就是座承载着厚重历史的城市。她是波黑的首都，一战的导火索在这里

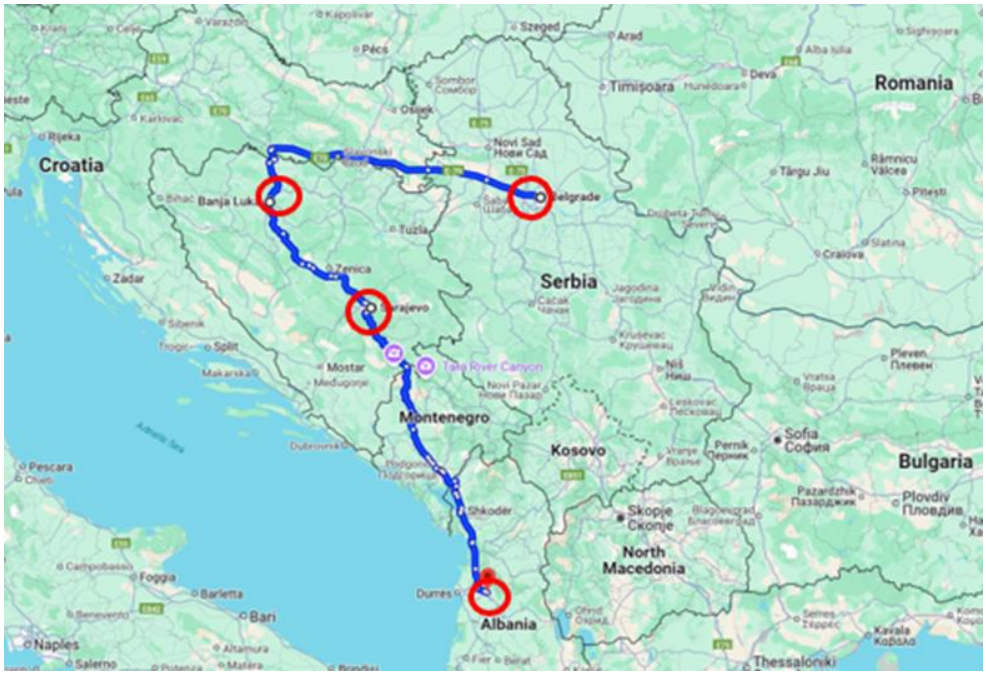
点燃，上世纪九十年代的波黑内战也在这座城市留下千疮百孔。现在已经没有内战，但走马灯似的各族裔轮替执政仍然拖累着经济的发展。前南斯拉夫加盟共和国除了斯洛文尼亚和克罗地亚接近西欧发达国家，其他几个都在欧洲吊尾。在欧洲还有一个吊尾的，就是我的下一站，阿尔巴尼亚。

四. 地拉那（Tirana）-阿尔巴尼亚首都

从萨拉热窝返回班尼卢卡的第二天早上，Sobot 医生安排车送我到克罗地亚首都萨格勒布搭飞机到地拉那。从班尼卢卡起飞的航班选择很少，都需要从萨格勒布，萨拉热窝或贝尔格莱德飞。从班尼卢卡往北到萨格勒布，也就两个半小时。往南飞一个半小时，飞机在地拉那机场降落。我们医院手术室有位护士是从阿尔巴尼亚去的，她对我专门想去地拉那有点不能理解，她说去旅游度假的多是西欧人，因为地拉那物价便宜。我告诉她小时候我听到的外国城市，只有地拉那，河内，平壤什么的，似乎不记得新闻里报道纽约，伦敦。

入住美资酒店的前台服务生，漂亮甜美，嘘寒问暖，我吃不准是因为我的中国面孔，还是我手里拿的美国护照。后来在街上闲逛才知道，阿尔巴尼亚人民对中国人特别友好，时不时会从那个街边角落喝咖啡聊大天的人群听到一声 "你好！"。 出租车司机多有六十多岁，都会说毛泽东三个字。本来计划参加一个一日游的团，后来因为旅游的人太少，没法组团。酒店帮我找了一位导游小伙子，三小时徒步游市区 90 欧元。小伙子二十八岁，新闻专业毕业，和几个朋友经营一家新闻自媒体，收入不是太好，有时间时做导游挣点外快。他说他的父辈们都和援助他们的中国工程师工作过，有的父母还给孩子起名叫 Mao。在六七十年代，中国人均收入只有 200 元人民币的时候，靠着中国的援助阿尔巴尼亚人均收入达到 4000 人民币。中国援助的钢筋水泥被霍查（当时阿尔巴尼亚总统）用来建碉堡，这位被害妄想病人在全国修了二十几万个碉堡，平均每七个人就有一个。在地摊上看到一本霍查的书-论中国，当然是阿尔巴尼亚语。我两个欧元买下来，准备回到美国后送给我妈妈。我妈妈说这本书肯定有中译本，要是五十年前在家里把原版和中译本都摆在书架上，那可牛了。市中心的国家博物馆在修缮，不对外开放，甚是遗憾。我特别感兴趣他们的博物馆如何展示 1945—1991 那段历史。参观了市郊的一号防空洞，对那段历史充满了反思和控诉。市中心有个街区，以前就是最高领导人居住的小区，街口有个碉堡。霍查和二号人物谢胡的住宅可以隔街相望，后来霍查把谢胡做掉了，对外称是自杀，但谢胡头上有两个入弹孔，不知道有没有手枪可以连发那么快。现在那个街区成了最繁华的酒吧一条街。让我想起了上海，一大会址旁边起了新天地。导游小伙子说没有人怀念那个年代，人人都生活在恐惧之中。但他对现状也不满意，抱怨各行各业都腐败，没有独立的媒体。我问他医生收入怎么样，他说光拿工资公立医院医生可能还不如外资酒店的服务生，但医生有灰色收入。他太太前几个月生孩子，送给妇产科医生 200 欧元红包，他们的人均月工资大概 1000

欧元。我忘了问他有没有送给麻醉医生。地拉那物价确实便宜，我进了一家 Fine Dining 的餐馆，四十欧元七道菜，都是米其林级摆盘，味道也不错。



贝尔格莱德城北 蓝色多瑙河

Tesla 的骨灰盒

贝尔格莱德铁托墓前铁托雕像

萨拉热窝 瓦尔特墓

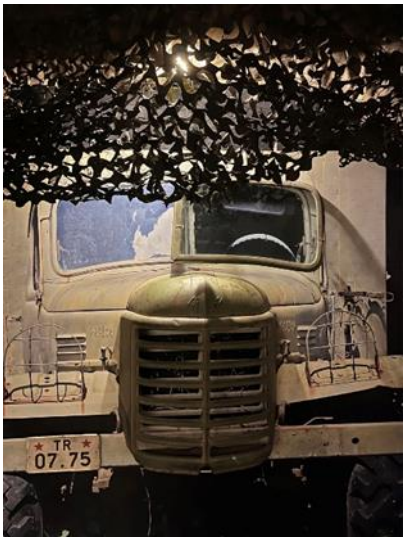
电影中的铜匠铺

电影中瓦尔特从此钟楼射杀德兵

萨拉热窝
波黑内战在民宅上留下的弹痕

地拉那
霍查时代在闹市区的碉堡被保留做纪念。图片右侧是一截柏林墙

地拉那
一号防空洞里中国援助的解放牌卡车



后记

这次由 CASA 组织的巴尔干之旅是一段难以忘怀的经历。CASA 骨干领导们的学术钻研精神和对 CASA 的热爱，令人敬佩。CASA 团队所到之处，皆受到热情款待。当地同行对 CASA 团队的专业素养和无私奉献表示高度赞赏，并一致恳请团队在未来再次访问。为我们 CASA 骄傲**!**

主编交班

陆晓薇

窗外的叶子由绿变黄又落下时,一年的年尾将到。走过两年 CASA Bulletin 主编的路，今天可以说我卸任交班了。

两年前不期的接了一个活，不能说喜欢或不喜欢，擅长或不擅长，自己先把自己抬了一个高度：为 CASA 做点事吧。

高中时曾经的一篇作文被语文老师在课堂上朗读，飘飘然的好像自己也可以为后代留下文字。后来发现生活无阅历，交际不广泛，文笔不滑润，思考亦无深度。于是开始记日记练笔。无奈有高考的压力，半年中的记录从日记渐渐变成了三日记，然后成为周记，月记， 至后来的随便记。但是回头读来， 还是颇有兴致。

我接手第一期 CASA Bulletin 时手忙脚乱，一开始多是盯着电脑屏幕发呆。稿件来得挺及时， 但做临床不比坐办公室的人，我对整理文章排版成杂志很不在行。MS word 会用但不熟悉，尤其是投稿中中文版的 format 着实叫人头疼，文章送来时可能因为软件的转换会跳出两种字体,间距也会不一致，想着投稿人也是和我同时代成长的一辈吧。

情急要交稿时还是让儿子给解了燃眉之急，感谢远程交流的应用，即使万水千山也无阻隔，毕竟年轻人是在计算机时代出生和成长，历经高中和考大学的洗练，有过无数次的实践经验，排版对他们来讲已经不是个事儿。但是没耐心！耐心，这一点上他们不如我们老一辈。仗着脸皮厚做第二期还有同样的问题：“这字体有点混乱啊，怎么弄？”，答“用 Format Painter 啊”， ” 啥是 Format Painter 来着？再讲一遍？“，隔着屏幕不耐烦的那一边终于说赶紧把杂志给我，我帮你弄吧。然后随着屏幕分享上鼠标的跳动，排版也漂亮和正规起来，虽然还会有”慢点慢点，老妈还没看清楚你怎么弄的“，回答我不用看清楚，已经弄好了，我还要准备考试，然后下线了，留下我一脸茫茫然。

内容有了，门面怎么办？前主编苗宁推荐了一个 Free 的网站封面设计，到我进去时也不知人家是否不乐意 free 了，还是怎么的,水印都打在上面了，这时开始怕被别人说侵犯版权，自己就设计了个最简单的方式，大块的色彩组合放在一起凑合吧， 以后每一期换个色块就搞定了，暗喜。

第三期开始顺了，又熟悉了在 Google 里狗所有的东西，终于从排版中解放出来，也不再受那个不耐心影响。编辑部陆陆续续的来了一些新人。除了去年介绍过的杨钊，宇燕，张珊，曲歌，天宇这些老成员，新加入编辑部的申建成和陈轶男医生也为编辑部增添了新的活力。申医生是快手，改过大段的讲座，很给力。轶男事业起步着实忙，但总结和写报道也是好手。对于别人易如反掌的东西，我觉得愧对主编的称号。非常

感谢这些朋友对我工作上的支持才成就了这两年的期刊发表，也感谢为 CASA Bulletin 积极投稿参与的医生们。

人生短暂，很多事很快就忘记了。但文字不骗人，走了很远的路再回头，原来 CASA 有两年的历史就在这里等着你翻看和回味。

转了两年的轴承，该歇下来上点润滑油了。

2024 年 12 月某日

中秋月圆

汪红医生摄于 2024 中秋夜

王海明回忆录 (续 7)

11. 报谢家人勿拖延　子欲养而亲应在

一升主治医师，收入高了，买了一座好房子。五卧五卫、共 7000（七千）平方英尺。我和丽计划接双方父母来享福。未料我母亲突患病，我立即回国探望，陪母亲做了许多检查，治疗也未立竿见影，假期所迫，不得已返美工作。不久，母亲病逝，临终前，她还时常细语：“我有个好儿子，海明在远方，妈为你自豪！” 我痛心疾首！！！ 妈妈曾是那样无微不至地关爱我，全家均为我年年三好学生而骄傲 。我给父母最大的报答就是考入北京医学院，那时是中国医学最高学府。我将北医录取通知书展现在全家人面前时，父母及全家齐声欢呼，兴高采烈。全家到照相馆拍了全家福 ！

父亲曾多次来美国居住，波士顿、纽约上州。他中年时曾是我们当地最好的医生。从市长到屠夫均是我爸的好朋友。儿时，一日去自由市场，我父亲买了一筐苹果、一筐鸭梨，叮嘱卖者送到医院家属院去。他弯腰选好两只老母鸡，左手向后摸钱包时，突然一怔，兜里没有了钱包。他警觉地向四周环顾一下，又低头查看足下周围，仍未见钱包。我爸说：刚刚买了苹果和鸭梨，的确付了款呀。忽然，一小青年小声对我爸说：王医生，这是您的钱包吗 ？我爸接过来一看喜言：正是，你在哪里捡到的 ？青年笑答：就在你身后。我爸连连致谢。我多看了几眼地上那只漂亮的大公鸡，摸摸它的血红鸡冠子。然后，我上前拎起那两只老母鸡要回家炖鸡了。一会儿，爸爸悄声告诉我：看到公安局李叔叔了吗 ？我说： 看到了，他儿子是我的同学。爸爸说：李叔叔刚才抓到一个扒手 。我惊奇地问：在哪里 ？我爸说：就在刚才卖水果的地方。我刚付了水果钱，将钱包一放回裤兜，扒手就轻巧地偷走了。李叔叔逼他来还了我的钱包。我懊恼地说：您怎么不当时告诉我呢，我要看看小偷什么模样 ！爸爸说：算了，他已认错。我说：长大我要当侦查员抓坏人。爸爸和蔼地说：妈妈和爸爸均希望你能成为一名好医生 ！

在北医大学五年，寒暑假我从未返家休息，而是每天在北医沉浸在学习英语和准备毕业考研究生了。那种轻松的学习，妙不可言，太幸福了 ！

因为大学里我不回家，父母在假期每年来看我。每当他们看到我静静地读书时，他们说：无比的欢乐，为好儿子骄傲 ！

第一个暑假，下午，在篮球场上结识了一位可敬的学长：张京安，77 级一班，第一学期免修英语课。他父亲是北京语言学院教育处处长。他那个傲 ！可我佩服。海明：“ Before long ，Long before 有何区别 ？” 我如实答：不知道，请你教我。他说：“ 我不告诉你，你去（北京学院路）四道口，内部外文书店，买一本 《科技英语阅读手册》即可。” 我当日就去买了此书，如今此书还在我的书架上。我问张京安，你免修英语课，那你还怎样自学呢 ？他答：我背记《英汉词典》， 背一页就撕掉一页！我岂能不钦敬 ！我又问：你们班还有谁很棒 ？他答：朱秀轩与董永和。我心中暗记牢。日后，我要

拜学二位学长！数年后，我和张丽终于成为朱秀轩和邱卫乔、董永和和徐林的好朋友 ，直至今日。结天下英才，我怎不进步和升华 ？

父亲 70 余岁时，身体很棒 ，耳聪目明，我曾想方设法帮其再找一个老伴。我父亲属于离休干部，全薪（有时还随物价上调），百分之百公费医疗，机关给订几份报纸，每年体检，还组织免费旅游。可我父亲很谨慎，一时未遇合适的。

2002 年秋，我陪父亲游江南。我们下榻上海徐汇区金轩酒店 （正面对太平洋商厦广场）。参观了上海静安寺附近外籍人员集聚区，那里有美国区、英德欧洲区、日本区，在会所餐厅吃意大利晚餐。参观了一美国朋友的四口之家。那友人是 John Hancock（美国约翰考克保险公司，著名老牌 ）派驻上海总裁。妻子艾琳原是中学教师，在家接送两个女儿读国际学校。他们的公寓和家俱都是公司的，免费使用。他每日向中国司机学中文，进步很快！我问他们如果外籍人士患病怎办？他们说：去 World-Link ，在市区内，很方便。

次日，我们父子打车去了 World-Link，那是大楼里的一层服务。医生们多是外籍或有国外规培的履历。我问：此地是门诊，若需收住院去哪里？“ 瑞金医院”。此大楼门诊上方一层专门负责移民体检。

北京外籍人士患病去和睦家医院（Beijing United Family Hospital 私立高档，1997 成立），位于酒仙桥附近（建台路 2 号）。一位海归作家患了感冒，诊治费数千美元。我去参观时，院长不在，经理迎出来说：欢迎王海明医生来参观。几日前，我们曾听你的同学谈及你，今日有幸见面。院内如五星宾馆 。

我们父子乘车去了浦东崭新的医院：大楼顶上立有“ 中美国际医院 ”。进楼到耳鼻喉科，见到约好的一年轻住院医师。他上二医法语班毕业。我询问工作可好，他答：待遇低，还时有“医闹”（要发财告医院，我和父亲听着新鲜）。在那样又新又大的医院工作，年轻医师应奋发向上才对。谢了年轻朋友，我们去参观浦东中心，上了金茂大厦，展望上海仍在继续建设着，正在崛起！

回返路上，去豫园看看，小桥流水景致好。城隍庙附近很热闹，南京路上游人如潮。我给父亲讲了哈同夫妇如何参与南京路建设而发财。昔日，哈同在上海工部局兼职，预先知道将开发南京路，他先下手大量置地发了一笔财。后来，他又将南京路上最繁华路段用上好红方木条铺设，接着木路两侧店铺纷纷林立，此段路就寸地寸金了，好一个精明的投资大亨 ！

根据好友徐志信医师（妻：鲍觉吾）的推荐，我和父亲去复旦大学上海医学院（原上海第一医学院）参观，枫林路整洁。儿科博士王卫平校长百忙中抽空在他办公室与我们座谈 36 分钟。他介绍了上一医发展规划。我问：北医毕业生在上医多吗，工作怎样？答案是：在上一医，北医毕业生不多，杰出者少。我说不奇怪。北方毕业生与上海人相比多保守。而上医毕业生到北医后多成就突出： 北医的韩济生教授（神经生理，已是院士）；周国围

教授（北大医院心内科教授，后去了深圳）；张宗昊老师 （小儿神经内科博士，后去洛杉矶儿童医院）..... 上海人机灵，对美欧日本的新知识、新技术反应快 ！我在北医时：北医的经费每年高于所有医学院，教授总数比上一医多，可出版书、发表论文不及上一医。王校长说：各有所长。

告别校长，我们到上一医教授餐厅进了午餐，我和父亲首次喝了上海三得利啤酒。餐后去数步之遥的中山医院。上楼到了麻醉科。大厅里，众人正忙吃午饭，忽见一中年男士伴一老者进屋，有人猜：走错门了，还是来告状的 ？我拿出自己的名片递给一青年说：请见贵科领导。很快薛张纲教授和蒋豪教授出来欢迎 ！蒋豪教授是老前辈，薛张纲高我一届，在中山医院读研后留科， 成为科重点培养人才。不久，他就升为科主任，而且负责上一医麻醉科年轻医师各附院规培轮转。后来我们在旧金山、芝加哥等学术年会上数次再会。

我们去了上海石库门（旧上海中产者集聚区）。我讲了二战前，上海曾是外籍人士的天堂；1941 年 12 月夏威夷珍珠港被炸后，太平洋战争爆发，许多欧美家庭、犹太人被日军关进集中营，历尽艰辛。战后许多移民去了美国。

在“ 老半斋 ”吃过午饭，我们去了福州路，那里有上海最大的书店。尊父亲建议买了《四书五经 上、中、下三册》、《曾国藩家书〉、 《傅雷家书》、《莫言小说集》、《严歌苓小说集 》、《 余秋雨精品集 》、钱钟书的 《 管锥编 》、《写在人生边上 》、杨绛 的《 杂文记 》、季羡林的《留德十年 》、王树增的《朝鲜战争》、姜戎的《狼图腾》、程乃珊的《上海探戈》、王安忆的《长恨歌》和《寻找上海》、薛理勇主编的《上海掌故辞典》、苏方学和郭兆甄的《民族之光： 邓稼先传 》和马晓丽的《 光魂： 王大珩传 》.....

福州路民国时称四马路：红灯区 （风化路），青楼、妓馆较多。传说：一山东年轻财主，首次来逛大上海，巧人指引至此，刚开始漫游两侧轻歌美景。忽然，前面一夭桃淑女弯腰轻吟足痛。大汉赶上一步关切地问侯：为何脚痛，附近可有医院。女子道：无大碍，只是求您搀我到前面我家。壮汉环顾左右竟无一人，只好轻搀扶到她家二楼。进屋，仙女倒茶致谢。青年见房间洁雅，轻舒口气，取出棉帕紧擦额头汗珠。女子坐床沿，请大哥帮助脱下鞋子，大汉刚将女子鞋脱下。忽然，衣柜后和房门口各窜出持刀男人。一男子大喊：光天化日，你敢欺负我老婆，走，一起去见官。大汉急辩解， 可屋里无人相信。不肯去见官，只好私了。大汉被榨去几乎所有银两。这是“仙人跳 ”。

书店员送我们下楼，打车回酒店。书很重，一青年志愿来帮助搬书。天热，他出一头汗，请他洗脸，闲谈几句。他是苏北人，来打工。先为一老板推销调味素。工资低，无福利。后来他自己单干。将母亲、妹妹均接来，自己配调味素，卖给各餐馆，利润好，他的名字是曲哲（姓曲，名哲），他和家人在上海开始了新生活。

我们计划去外地参观。通过金轩酒店前台服务员找到一大众出租车司机，赵长锁，他本是上海一工人，工厂倒闭，他开了出租。他与另一司机合开一辆车，人歇车不歇。每日收入

300 – 500 元人民币，我与他协约：每日付他 800 元 人民币，还包吃喝，每晚付他 200 元住宿。他很高兴，满意。我要求他安全第一！他满口答应！我将他的手机号和出租车牌号告知几位亲朋。

早晨，吃过早点。我们三人驱车去周庄（江南水乡古镇）。下车后，我们父子开始漫游。镇子不大，游客如云。街边诗人参照我们父子和张丽名字，还有我们的职业即兴赋诗，迅速裱好。我和父亲步行到 “ 双桥 ” （两座相连有转弯的小石板桥）。进了河西餐厅，叫了一桌菜（司机也在场），饮着上海三得利啤酒，品尝 “ 万三肘子 ” （服务员推荐此肘子是当地特产 ）边吃边聊，那闲情逸致 …… 我讲故事：有位中国著名画家 – 陈逸飞，他以周庄双桥为景，绘一油画 《 故乡的回忆 》。此油画被美国石油大亨哈默 （医学博士 ）重金收藏。 哈默 1984 年访华时，将此油画赠予邓小平。自此，周庄名扬天下！

出周庄，到苏州。参观了狮子园 （著名美籍建筑设计师贝聿铭的祖宅）、拙政园和几处民居。在老城西侧， 一个巨大的新苏州工业园已落成。

夜宿华侨饭店。远望 “寒山寺 ” ，不禁想起诗人张继的 《枫桥夜泊 》“月落乌啼霜满天，江枫渔火对愁眠。姑苏城外寒山寺，夜半钟声到客船。”

告别苏州，去南京。
南京曾是十二朝都，昔称应天府、江宁府，古为吴地，别称“ 金陵 ”。车至长江，我请赵师傅慢速开过去，再慢速返回，然后再过江去，只是要细观长江 。先去南京大学医学院参观。我有一学长，数年前海归，曾任医学院长，去时豪情万丈，回来轻悄返纽约。我问：何故 ？他答：既无人事权，又无经济权 ，他 “ 好似一碗阳春面上的几根火腿丝 …… 。”

那夜住在“ 中央大酒店 ”，回味民国时期的故事。傍晚我们去秦淮夜市，良辰美景使我想象明清盛世时，此地是否也如此辉煌。鸭血粉丝汤店门前最热闹。还有盐水鸭、牛肉锅贴、炒螺丝 ……。

一日去参观总统府，还有太平天国纪念馆。次日，上紫金山，拜中山陵。陵墓为警钟形，寓意“ 唤起民众 ”。台阶共 290 级，分为 8 段，各段之间有一平台。自下仰视只见台阶，不见平台；向下俯视唯见平台，不见台阶。

恋恋不舍离南京。赵师傅载我们直入杭州饭店。安顿下来。我和父亲去西湖附近的 “ 知味观 ”，江浙风味好。饭后，我们乘三轮黄包车慢行。车夫已婚，妻子开发廊，儿子读书好，盼升大学。在杭州饭店偶遇一浙大学生，他要去德国留学。因为所有德国国立大学均免学费。我向他推荐季羡林教授的回忆录 《 留德十年 》，并祝他好运 ！

游览了西湖，品尝了“西湖醋鱼”。去了灵隐寺，慢步游，路旁树高成荫，空气潮润。众僧忙着帮游者所购 “ 金佛卡 开光 ”，人多，处处焚香，烟气缭绕 。

去了宋城，不禁想起 《 水浒传 》。仿佛穿越时光，回到汴梁，浮想起张择端的《清明上河图》。

从杭州去黄山，路况欠佳。车上有人说：浙江领导曾对安徽省政府提出要承包黄山，保证旅游业更好，浙江人创造了许多奇迹。夜宿黄山风景区内。

次日，登黄山，先乘一段缆车。然后，徒步向上。我父亲双手执登山杆，头戴小帽，身背小包，坚持与众游客一起登上了光明顶，那个兴致盎然 ！ 下山时，路窄而陡。为了安全，请父亲乘二人抬滑竿下山。轿夫们前后哼着号子，下山健步如履平川。我一路紧跟，平安无恙。

江南游的路上，我讲了：上海几家著名医院的创立；哈同赤拳闯上海；黄楚九的 “ 大世界 兴衰 ” ；澳洲华侨兄弟首开 “ 上海百货大楼 ”；诚实的摆渡青年得机遇成为 “ 五金大王 ” ；上海 1930 年代的 “ 新生活运动 ”；留学先驱 – 容闳如何创办 “ 江南制造局 ”；同盟会武将– 陈英士怎样攻占“ 江南制造局 ”；中共为何建党于上海；顾顺章叛变；霞飞路的枪声；淞沪会战；军统和中统怎样在上海抗日；还有上海滩三大亨兴亡记. . . . . 。

欢快的假期飞逝而去，可父亲慈爱的音容笑貌印在我的脑海里。

12. 医师仍需学理财 开源节流巧安排

无论做什么样的工作，既要敬业 ，又要有危机感。建议：常备数月生活费，以备不测风云。

数年前，附近医院有一美籍华人消化科医师（ 来自云南医学院 ）。在一大雨磅礴之日，往返于诊所和医院。在纽约一条老的高速公路（高低、蜿蜒曲折）上碰一大石块。他冒雨下车查看，忽然，另一女中年白人驾车驶来，雨大很难看清路途，当她骤然见一车横停路中，紧急刹车 ！可她的车还因惯性太大，剧烈撞上了路中车，而那一刻，消化科医生正蹲在车旁，猝不及防，被撞当场身亡 ！他妻暂无工作，在家带两个孩子。可想而知，这惨祸重创此家 ，令人扼腕叹息!

在美国，曾有一些球星，骤然获高收入。年薪在数百万美元以上。于是乎，开始高消费，甚至开始视金钱如粪土，以为 “千金散去复还来 ” ！可万未料到，有时命运多舛。一旦受伤、伤残、离婚后，竟贫困潦倒 ，令人唏嘘 ！

不久前，到急诊室查看一手术前的患者。她，52 岁，文雅，术前诊断：腹前壁疝。我问她此患多久，她难为情地说：已有数年。我再问：为何不早来诊治。她说：一直在对付着（用布腰带束缚着），因为医疗费太贵了，实在难以支付。她接着说，她先夫原是家庭医

生，有两个孩子。本来生活稳定，没料到丈夫患胰腺癌英年早逝。虽有保险公司理赔一些，可她不善投资。几乎是坐吃山空。她曾大学毕业，新闻专业。她凄惨地说：如今报社纷纷倒闭，她曾试着撰文为生，但收入太少，不幸落魄潦倒成 “ 白人贫困人口 White Poverty ”。言词几近羞愧难当 ！我赶紧安慰她，我只负责帮助她，一定将此疾病治愈。她泪如泉涌，令我几近乌咽 ！医生的家属竟落此困境，谁之错 ？ 手术后，她回家了。可她那凄惨和羞愧久久让我难以忘怀 …….

我有一邻居，早年曾偶赢彩票巨奖。他很聪明，低调生活，还买一加油站伴卖零用品和快餐。雇有一经理料理一切。自己在家，内外修树养花，或与朋友们打高尔夫球。他既有巨款日日生息，还有活干：时常去店里看看。小日子美滋滋的，智者 ！

CASA 最受人尊敬者之一，周海峰 MD ，PhD 曾撰文 《股海沉浮》，刊于 CASA 月刊。介绍他学习投资的心得，非常之好 ！

美国 CNBC 电视台 （东部时间）每晚 6:00 - 7:00 PM，投资专家 Mr. James Cramer 教授大众理性投资。

他建议：
1）退休金应买入 Standard and Poor Index（ 如：SPY ）。优点： 管理费很低；你不用做任何研究；定期或不定期买入；长期（ 十年以上） 平均年增 10% ！
2）其他的，听专家的。

James Cramer 毕业于哈佛大学，曾在华尔街高盛公司工作，发了财。现为一个公益基金服务。著有几本关于投资的书。

每晚 6:30 （东部时间），公共电视台（ Public Broadcast Station ， PBS ）有半小时股市播报， NBR（ Nightly Business Report ）内容丰富、有指导价值。经常观看，会对了解经济形势及合理投资有益。

Chinese American Society of Anesthesiologists Foundation, Inc.
美国华人麻醉医师基金会

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尊敬的麻醉医师,

您好!盼望已久的美国华人麻醉医师基金会(CASA Foundation, Inc.)在多方面的努力下终于得到 IRS 批准而正式成立了。

我们诚恳希望并衷心感谢您对美国华人麻醉医师基金会的捐助和支持。您的捐赠和支持将为提高世界各地华裔麻醉医师之间的相互交往合作,宣传麻醉知识和科研成果做出贡献。CASA 基金会宗旨在提高华人麻醉医师社团的社区和文化活动,促进就业机会,并提高我们下一代麻醉医师职业水平、临床技能和领导才能。

您的捐款会享受 IRS 的税务减免,我们会提供相关的材料。如果捐款到一定数额,您将会成为 CASA 的功勋会员。我们会颁发会员证书。

请提供您的电子邮箱地址、姓名和联系地址。我们会定期向您汇报基金会的运作和所支持项目的进展状况,也希望得到您的及时反馈和您所关心并希望我们支持的项目。一旦相关项目申请得到批准,CASA 基金会将会鼎力支持。我们会认真听取各方面意见,讨论评估各项目的必要性、可行性和进展情况。

非常希望 CASA 会员们精诚合作,感恩我们一起播种一颗颗充满希望的种子,搭建一座座通往未来的桥梁。为更好地服务华人麻醉医师的工作、生活和健康,为培养年轻有为的麻醉医师,为患者的围术期安全和麻醉科学的进步,恳请各位同仁支持! 在此,CASA 基金会向您们表示最诚挚的感谢!

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华声医疗，成立于 2013 年，总部位于中国深圳；是一家拥有完全自主知识产权，集研发、制造、营销为一体的中国国家高新技术企业。 华声是全球 POC 专科应用领域一线品牌，以临床专业专科精准诊疗为基础，提供“专科专用”的产品和服务。 华声拥有“一核两翼”—— 其核心是云端医疗服务，两翼是生命信息支持、智能超声影像。 目前，华声与全球顶级医院共同建成培训基地，与多所院校建立技术前沿的联合实验室。华声致力于服务全球，聚焦全球中高端医疗用户；进口替代，走进国内 400 多家三级医院；出口升级，产品出口 100 多个国家和地区。 华声用智慧科技，呵护更多生命健康需求，让更多人分享专属生命关怀。

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指南针 (英文型号名： Navi S) ：秉承着“专科专用”的理念，经过大量的市场调研，了解了一线客户的痛点和需求，华声医疗于 2016 年推出了业内首款麻醉疼痛专用彩超——指南针。指南针以其 19 寸超大的全触屏设计、全面的穿刺解决方案，很好地克服了传统超声操作复杂、穿刺针显影不清等问题。通过近几年的市场推广、专家体验、学术合作等，在麻醉疼痛领域，目前在中国市场占有率稳居第一，在国际上也逐渐树立口碑。打破了进口品牌在相关领域的传统垄断局面。

北斗 （英文型号名：Labat SP）：2019 年，华声医疗推出了首款麻醉专科 AI 智能超声——北斗。作为一款高端彩超，北斗采用了 HOLO BEAM 全息平台，无需调节焦点，图像更清晰。同时，基于强大的硬件平台，北斗智能识别神经、血管及各类组织，配合专业的教学软件，使得超声下组织识别更为快速、简单，也极大地缩短了入门医生的学习曲线。此外，北斗的激光导航功能更是产学研合作的成果之一，创新地解决临床穿刺定位困难的问题。

Dr. Henry Liu
(CASA 2023 Photo Competition)

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