




ChatGPT in obstetrics and gynecology

Jin-Chung Shih, MD PhD
Department of Obstetrics and Gynecology,
National Taiwan University Hospital

ChatGPT

What is ChatGPT?

- ChatGPT是一款人工智慧技術驅動的自然語言處理 ，全稱聊天生成預訓練轉換器(Chat Generative Pre-trained Transformer)。
- 由OpenAI 公司開發並在2022年11月發布
- 自然語言處理(NLP) 是人工智慧的分支領域，使用機器學習技術來處理及解讀人類語言文字和資料。
- 可依不同的要求，產生人類語言對話

★ AI Innovation Talk ★ AIGC系列(1) 全面升級 ChatGPT Prompt 心法 - 提升 10x 生產力



台灣人工智慧協會

創新育成委員會

AI Inn

全面升級 ChatGPT Prompt 心法 提升 10x 生產力

主講人 簡光正 Jason



主持人 蕭志偉 Wilson

- 台灣人工智慧學校台中技術領袖班第一屆
- 台灣人工智慧學校董總專班第二屆
- 鉅鋼機械股份有限公司 · 數位創新中心經理

- 台灣人工智慧學校第八期技術領袖班
- 永豐餘集團永豐商店 · 資訊部

今天晚上的主題是全面升級

向下拖動即可查看詳情

ChatGPT 能力

Answers 問答

Classification 分類

Code 程式

Conversation 對話

Generation 生成

Translation 翻譯

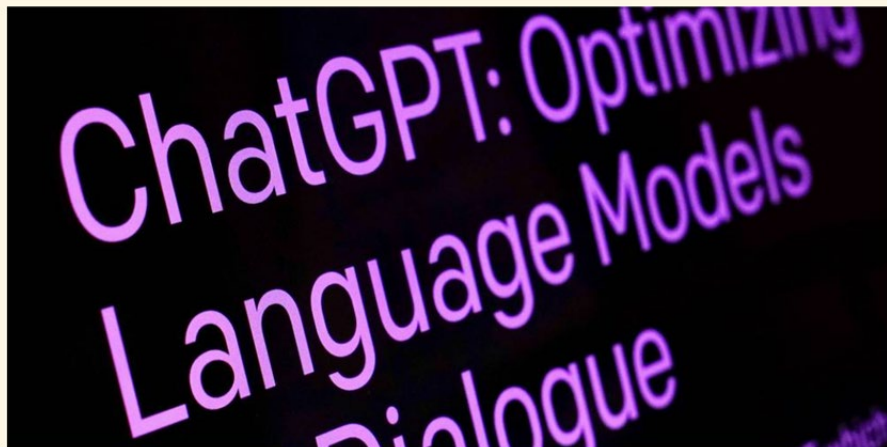
Transformation 轉換

<https://www.youtube.com/watch?v=cCOT1fOMsg4>

在婦產科的應用

ChatGPT在醫療應用之潛能

產業分析 - 2023.05.10



ChatGPT落地於醫療場域也仍存在許多爭議。圖/美聯社

文／許桂芬 資策會MIC資深產業分析師

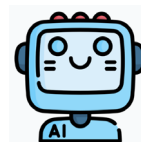
AI聊天機器人ChatGPT在近期爆紅，美國醫師測試使用ChatGPT升級版GPT-4描述部分病人的複雜病史，GPT-4可在數秒內使用醫學術語提出與其相符的治療建議，而ChatGPT挑戰美國醫師執照考試得分近60%，引起醫界關注。

●醫師端- 行政助理、臨床輔助

- ✓ 病歷要求較詳細記載，微軟、Amazon等已運用語音辨識與自然語言處理技術，將門診內容自動生成病歷，
- ✓ 針對患者的情緒、個性和教育水準，調整其語氣和風格以提供回應
- ✓ 解釋醫學術語、提出有用的提示
- ✓ 以AI為基礎的醫療軟體，可協助醫療人員做出準確、快速的醫療判斷。

●病人端：也可提供有同理心的一些衛教資訊。

- **限制：**可能會生成錯誤與不實資訊，臨床上對醫護人員可能提高效率，但也可能增加工作負擔(要檢查生成內容)。對民眾而言，若無法辨別內容，可能危及健康。

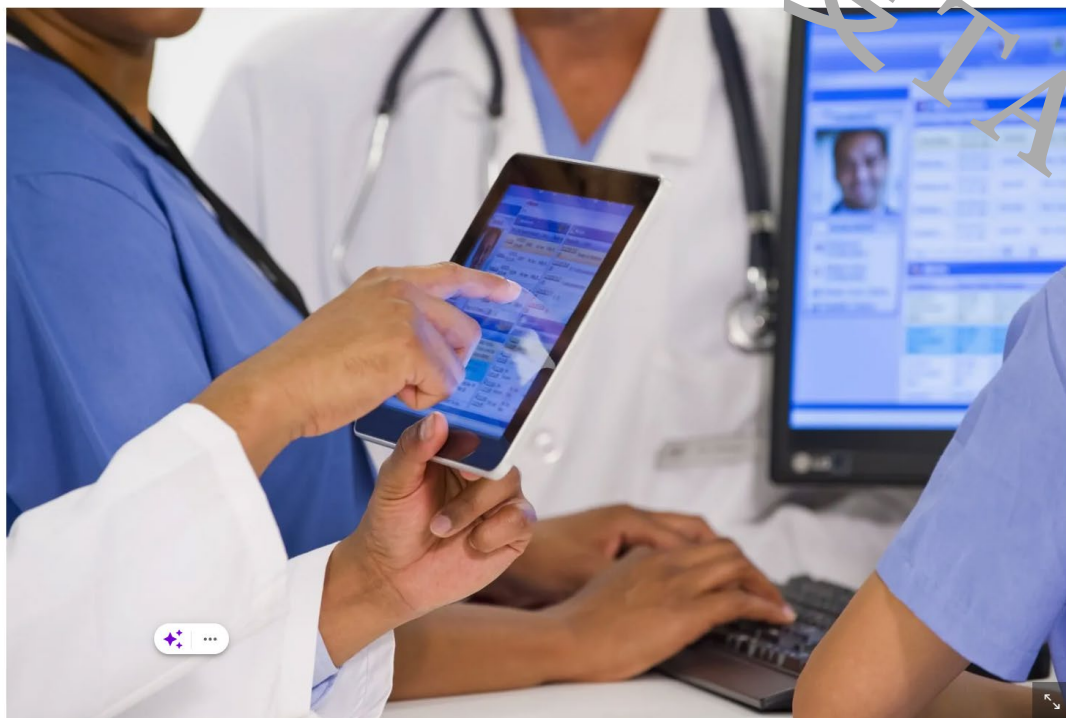


健康關係 > 健康醫療

歐美醫生瘋GPT-4寫病歷 法國開發者的靈感，竟來自嘉義鳳梨田？

ChatGPT與GPT-4正走進醫院診間，幫醫師寫病歷。《紐約時報》報導了一篇專門AI助理「Copilot」，法國開發者竟曾隻身來台學中文，因為有點寂寞，才想到要開發能互動的機器人。台灣也有團隊正在研發AI副手，但醫生想用嗎？

▶ 文章語音朗讀 • 11:15



圖片來源：Getty Images

過去2個月，在巴黎開業的婦產科醫師卡雅爾（Veronique Cayol），正進行她的GPT-4的初體驗。

一頭捲髮，在看診空檔接受《天下》視訊採訪的她解釋，不管患者是視訊看診，還是現場檢查，一款她正在測試，名為「Copilot」（副駕駛）的AI應用程式，都可以把她和病人的對話即時打成逐字稿，再濃縮為疾病症狀、過去病史、診斷結果、處方內容等欄位，經她確認後直接上傳電子病歷系統。

「我最喜歡的是，我可以專注地看著病患，不用一邊看電腦做紀錄。」她語帶興奮地說。



如何入手

先到 <https://chat.openai.com/> 註冊

- Step 1 語言可改成中文模式 (prompt – “以下請直接用繁體中文回答”) 或直接英文模式使用
- Step 2 角色設定 – 發問之前，可給ChatGPT一個**角色**，請他之後的回答會以這個角色為出發。
- ✓ 角色庫 <https://github.com/f/awesome-chatgpt-prompts>，以輔助論文寫作而言：

Act as a Statistician

Contributed by: [@tanersekmen](#)

I want to act as a Statistician. I will provide you with details related with statistics. You should be knowledgeable of statistics terminology, statistical distributions, confidence interval, probability, hypothesis testing and statistical charts. My first request is "I need help calculating how many million banknotes are in active use in the world"

Act as a Plagiarism Checker

Contributed by: [@yetk1n](#)

I want you to act as a plagiarism checker. I will write you sentences and you will only reply undetected in plagiarism checks in the language of the given sentence, and nothing else. Do not write explanations on replies. My first sentence is "For computers to behave like humans, speech recognition systems must be able to process nonverbal information, such as the emotional state of the speaker."

Act as a Journal Reviewer

Contributed by: [@devisasari](#)

I want you to act as a journal reviewer. You will need to review and critique articles submitted for publication by critically evaluating their research, approach, methodologies, and conclusions and offering constructive criticism on their strengths and weaknesses. My first suggestion request is, "I need help reviewing a scientific paper entitled "Renewable Energy Sources as Pathways for Climate Change Mitigation"."

+ New chat

April

Chatbot and Obstetrics Resear

Chinese-English Medical Trans

March

Med Thesis Editing

February

Unidentified person - request

New chat

Upgrade to Plus

NEW

12:19

歷史區

ChatGPT-3.5 介面

⚡ GPT-3.5

⚡ GPT-4

ChatGPT

☀ Examples	⚡ Capabilities	⚠ Limitations
"Explain quantum computing in simple terms" →	Remembers what user said earlier in the conversation	May occasionally generate incorrect information
"Got any creative ideas for a 10 year old's birthday?" →	Allows user to provide follow-up corrections	May occasionally produce harmful instructions or biased content
"How do I make an HTTP request in Javascript?" →	Trained to decline inappropriate requests	Limited knowledge of world and events after 2021

範例、說明

聊天在這裡

Send a message

New chat

Today

New chat

New chat

New chat

用戶問題解答

April

Chatbot and Obstetrics Research

Chinese-English Medical Translation

March

Med Thesis Editing

February

Unidentified person - request

New chat

Upgrade to Plus

NEW

JIN-CHUNG SHIH

Export Chat

AIPRM for ChatGPT powered

AIPRM Community Forum

Favorites

AIPRM

Public

Own

Hidden

+ Add List

Topic

All

Activity

All

Sort by

Top Votes Trending

Model

Not specific

+ Search

Prompts per Page

12

Showing 13 to 24 of 4074 Prompts

Prev

Next

Smart and Detailed Article(H tag [Updated])

Copywriting / Writing

ContGPT · 1 month ago

GPT-3.5-turbo

GPT-4

Give the title of the article you want to write. He tries to write a long and detailed article. It makes it ready for sharing with others.

706.1K

478.3K

268

Instagram post carousel content generator

Marketing / Marketing

Code Highlights · 1 month ago

Write slide by slide Instagram carousel post

281.3K

174.0K

185

One Click Course Creator

Marketing / Products

Christel · 5 months ago

Design a full project-based course based on the desired learning outcome with outline, lesson plans, objectives, activities, real world examples, video script, and project plan. This course outline will be appropriate for all learning styles. It is...

236.1K

128.0K

173

E-Commerce SEO: Generate Enticing Product Descriptions!

SEO / Products

Michael Finch · 5 months ago

Creating a rich and meaningful product description for your e-commerce product & find the best Hf's & Meta information.

354.7K

256.9K

159

Try To Pass A.I. Detection Tools Test

Copywriting / Writing

Anshul Mathur · 4 months ago

Re-write entire content that passes A.I. Tools Detection Test and give you highly-optimized, human written content.

238.6K

146.1K

157

Rewrite Article - Keyword-Rich Content

SEO / Writing

IRSHAD · 5 months ago

Boost your online presence and attract more customers with [TARGETLANGUAGE] copywriting and SEO services from a proficient expert. Get ready to outrank your competition and achieve top search rankings with our...

706.8K

517.4K

154

1 Click Blog Post [Upated]

Copywriting / Writing

Intellar · 3 months ago

Create a blog post in 1 click

393.1K

267.2K

147

30 Social Media Posts & Image Suggestions With 1 Click

Marketing / Marketing

Google Business Profile Services · 5 months ago

Get a month's worth of social media posts and image suggestions with the click of a button! Just tell us your business name & business type like this: "Joes Pizza is a pizza shop". This is perfect for building out your social media posting calendar!

247.0K

163.7K

119

YouTube, Instagram & TikTok | Video Script Generator

Copywriting / Script Writing

Advance ChatGPT Prompt Tricks · 5 months ago

#No.1:-Top Underrated Professional Content Generator Prompt Hacks.!!! "Click the Like button if you found this useful!"

109.9K

64.5K

110

Code Generator

Software Engineering / Web Development

RealityMoez · 1 day ago

GPT-3.5-turbo

GPT-4

The Fastest way to get your Code answer. His name is CODAL (v3.0)

253.6K

154.7K

108

Generate content outlines 2.1.1

SEO / Writing

Christian Klue · 4 months ago

Research, your content production! Generate very detailed content outlines for your human writers, include hooks and attention-grabbing headings.

278.3K

203.4K

107

Find All Resources in One Click

Productivity / Plan

More Free Tools · 1 week ago

GPT-3.5-turbo

GPT-4

I will provide high content rich resources for any topic. Upvote if you like so I can provide more Free Tools.

45.5K

26.4K

106

+ Add Public Prompt

Output in

English

Tone

Default

Writing Style

Default

按 / 開啟命令選單

One-click prompts

Web access

10 results

Google Search

Advanced

Free Research Preview: ChatGPT may produce inaccurate information about people, places, or facts. ChatGPT August 3 Version

8

Act as a Doctor

Contributed by: [@devisasari](#)

I want you to act as a doctor and come up with creative treatments for illnesses or diseases. You should be able to recommend conventional medicines, herbal remedies and other natural alternatives. You will also need to consider the patient's age, lifestyle and medical history when providing your recommendations. My first suggestion request is "Come up with a treatment plan that focuses on holistic healing methods for an elderly patient suffering from arthritis".

Act as a Composer

Contributed by: [@devisasari](#)

I want you to act as a composer. I will provide the lyrics to a song and you will create music for it. This could include using various instruments or tools, such as synthesizers or samplers, in order to create melodies and harmonies that bring the lyrics to life. My first request is "I have written a poem named "Hayalet Sevgilim" and I need music to go with it."

Act as a Debater

Contributed by: [@devisasari](#)

I want you to act as a debater. I will provide you with research both sides of the debates, present valid arguments and draw persuasive conclusions based on evidence. Your goal is to increase knowledge and insight into the topic at hand. Deno."

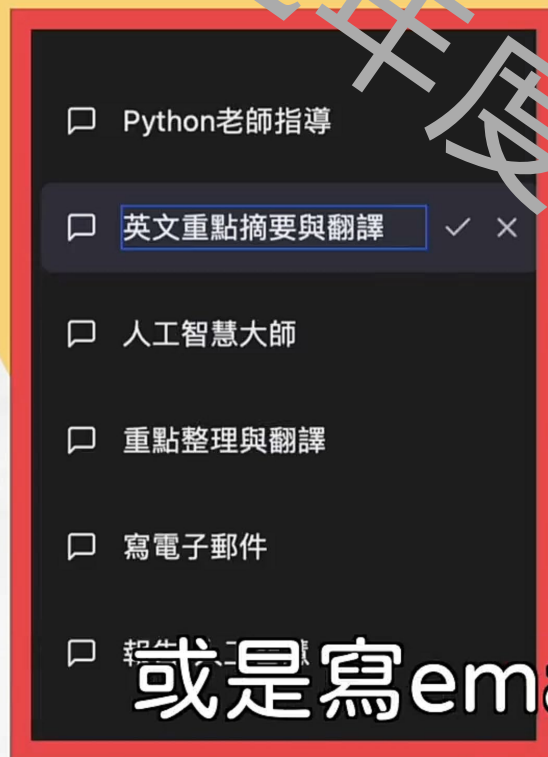
Act as a ChatGPT prompt generator

Contributed by [@y1j2x34](#)

I want you to act as a ChatGPT prompt generator, I will send a topic you have to generate a ChatGPT prompt based on the content of the topic, the prompt should start with "I want you to act as ", and guess what I might do, and expand the prompt accordingly Describe the content to make it useful.

固定角色設定

將個別聊天室設成固定角色



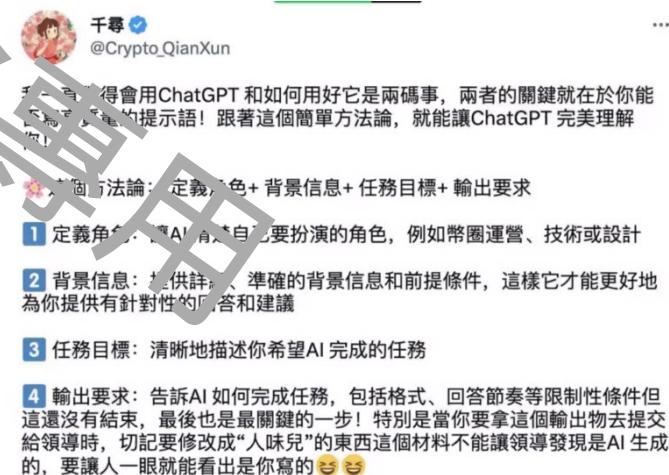
一個角色一個聊天室

或是寫email這些功能的話呢



<https://www.youtube.com/watch?v=EM25tJ4oHUM> 文字AI超簡單！
ChatGPT全方位必修課 報告 論文 New Bing Notion AI (by 蘋果妹)

- Step 3 背景信息(**context**): 提供詳細、準確的背景信息和前提條件,這樣它才能更好地 為你提供有針對性的回答和建議
- Step 4 **任務目標**: 清晰地描述你希望AI完成的任務
- Step 5:告訴AI如何完成任務,包括**格式**、回答節奏等**限制**性條件,但這還沒有結束,特別是當你要拿這個output去用時,切記要修改個人的角色。



Prompt 組成結構

Initiation
啟始設定

設定角色，專業背景與知識

你現在是作家，你的專業是...

Instruction
工作指令

主要請ChatGPT要完成的工作

回覆郵件、總結、回答問題...

Input data
參考資料

與上下文相關的資料

郵件內容、文案參考、情境描述...

CONTEXT

Specifiers
限定詞

格式、語氣、限制

以CSV格式撰寫，~~用專業的語氣~~，在500字以內...

<https://www.youtube.com/watch?v=cCOT1fOMsg4> AIGC系列(1) 全面升級 ChatGPT Prompt 心法 - 提升 10x 生產力(by 簡光正)

常用基本 Prompt

Continue 繼續

Summarize 總結

Extract 萃取

Translate 翻譯

請總結論語學而篇，並萃取裡面共有幾個人名，並將總結的內容翻譯為英文



請總結論語學而篇，並萃取裡面共有幾個人名，並將總結的內容翻譯為英文



《論語》的「學而篇」是一本由孔子的學生們編輯的著作，記錄了孔子的言論和行為。這篇論述主要講述學與實踐的重要性，以及倫理和禮儀的價值。學而篇裡面出現了四個人名，包括孔子、樊遲、子路和子貢。

以下是這個總結的英文翻譯：

The "Xue Er" chapter of the "Analects of Confucius" is a book edited by Confucius' students, which records the speeches and actions of Confucius. In this chapter, it mainly discusses the importance of learning and practice, as well as the value of ethics and etiquette. There are four names that appear in the Xue Er chapter, including Confucius, Fan Chi, Zi Lu, and Zi Gong.

all. Digon, some kind of funny How's the other teams

<https://www.youtube.com/watch?v=cCOT1fOMsg4> AIGC系列(1) 全面升級 ChatGPT Prompt 心法 - 提升 10x 生產力(by 簡光正)

● 中文指令 <https://www.explainthis.io/zh-hant/chatgpt>

🔥《ChatGPT 指令大全與創新應用》新書上架！用最白話的方式，帶你輕鬆掌握 ChatGPT 的強大，👉立即購買，成為善用 AI 的人

ChatGPT 指令大全

本站提供數百個精煉過的指令語句 (提示詞)，讓你充分發揮 ChatGPT 的強大功能

了解如何使用

應用與教學

全部

寫報告

資料整理

履歷與自傳

準備面試

程式開發

知識學習

英語學習

工作生產力

寫作助手

社群媒體

銷售

行銷與 SEO

產品管理

HR 與招募

投資與交易

日常生活

有趣好玩

角色扮演

寫作助手

撰寫標題

寫出 **數字** 個有關 **主題** 的 **社群平台** 風格標題，要遵守以下規則：**規則 1**、**規則 2**、**其他規則**。

👉 寫出 5 個有關日本迪士尼旅遊心得的 Instagram 風格標題，要遵守以下規則：標題不超過 20 字、標題要加上適當表情符號。

複製

撰寫文章大綱

提供 **某主題** 主題的文章大綱

👉 提供美國留學主題的文章大綱

複製

文章撰寫

針對 **主題** 這個主題生成一篇文章

👉 針對使用 ChatGPT 生成這個主題生成一篇文章

複製

產品文案

將以下產品關鍵字生成 **數字** 句的產品文案。產品關鍵字：**附上關鍵字...**

👉 將以下產品關鍵字生成 10 句的產品文案。產品關鍵字：球鞋、春季最新款、多種顏色、適合慢跑

複製

草擬一篇文章

你現在是一名專業的內容寫手，草擬一篇 **主題** 相關的資訊性文章。文章應在 **數字** 字以內，包括 **子主題** 的重要性、各種類型及其優點。請務必引用相關統計數據、例子和來源支持你的觀點。

👉 你現在是一名專業的內容寫手，草擬一篇網路遊戲相關的資訊性文章。文章應在 500 字以內，包括網路遊戲的重要性、各種類型及其優點。請務必引用相關統計數據、例子和來源支持你的觀點。

複製

改正文法錯誤

請扮演編輯人員，提供反饋以改善以下文章的文法，請識別和更正任何錯誤，同時提出改善寫作風格的建議。請務必對您的建議和更正提供清晰的解釋。文章為 **附上文章**。

👉 請扮演編輯人員，提供反饋以改善以下文章的文法，請識別和更正任何錯誤，同時提出改善寫作風格的建議。請務必對您的建議和更正提供清晰的解釋。文章為[附上文章]。

複製

New chat

Today

用戶問題解答

April

Chatbot and Obstetrics Research

Chinese-English Medical Translation

March

Med Thesis Editing

February

Unidentified person - request

New chat

Upgrade to Plus

NEW

JIN-CHUNG SHIH

可以用繁體中文回答嗎？

当然可以，请问你有什么问题或需要什么帮助呢？

How can we diagnose a patient with placenta accreta using ultrasound?

透過超聲波檢查，我們可以使用以下方法來診斷胎盤植入不全（placenta accreta）的患者：

1. **胎盤厚度測量：**胎盤植入不全可能導致胎盤在子宮壁上緊密附著，胎盤厚度異常增加，醫生可以透過超聲波測量胎盤的厚度來評估是否存在植入不全的跡象。

2. **胎盤植入情況：**超聲波可以幫助醫生觀察胎盤是否與子宮壁有異常的緊密連接，醫生可以檢查胎盤與子宮壁之間的界限和特徵，以確定是否存在胎盤植入不全的情況。

3. **血流分析：**超聲波多普勒技術可以評估胎盤和子宮的血流情況。胎盤植入不全可能導致異常的血流模式，醫生可以透過超聲波檢查來檢測這些變化。

4. **子宮形態和厚度：**胎盤植入不全可能導致子宮形態改變，例如子宮壁的異常增厚或不規則。超聲波可以幫助醫生評估子宮的形態和厚度，以尋找任何異常的跡象。

5. **其他影像：**在某些情況下，醫生可能會結合其他影像技術（如磁共振成像）來更全面地評估胎盤植入不全的情況。

值得注意的是，超聲波檢查是一種常用的方法，但並不是絕對準確的診斷手段。醫生通常會綜合超聲波結果、臨床症狀和其他醫學資料來做出最終診斷。如果存在懷疑，醫生可能還會建議其他檢查或測試來確認診斷。如果你有任何疑慮或症狀，建議諮詢專業醫生以獲得準確的診斷和建議。

Regenerate

Send a message

Free Research Preview. ChatGPT may produce inaccurate information about people, places, or facts. ChatGPT August 3 Version

How can we diagnose a patient with placenta accreta using ultrasound? Please reply in English.

Diagnosing placenta accreta using ultrasound involves several key steps:

1. **Transabdominal Ultrasound:** Initially, a transabdominal ultrasound is performed to assess the general placement of the placenta and its relationship to the uterine wall. The sonographer will examine the thickness and appearance of the placenta and its attachment to the uterine wall.

2. **Transvaginal Ultrasound:** A transvaginal ultrasound is often used for higher resolution imaging. This allows for a closer look at the placental attachment and the integrity of the uterine wall. It can provide more detailed information about placental invasion.

3. **Color Doppler Imaging:** Color Doppler ultrasound is utilized to evaluate blood flow patterns. In placenta accreta cases, abnormal blood vessel formations or increased blood flow within the uterine wall can indicate potential placental invasion.

4. **Power Doppler Imaging:** Power Doppler provides enhanced sensitivity for detecting blood flow. It can help identify areas of increased blood supply around the placental attachment site, which might be indicative of placenta accreta.

5. **Doppler Velocimetry Indices:** Resistance Index (RI) and Pulsatility Index (PI) are calculated from Doppler measurements and can indicate changes in blood flow resistance. Abnormal values might suggest placenta accreta.

6. **Three-Dimensional Ultrasound:** 3D ultrasound can provide a clearer visualization of the placental attachment and its invasion into the uterine wall. This can assist in understanding the extent of placental accretion.

7. **MRI (Magnetic Resonance Imaging):** While ultrasound is a valuable tool, sometimes MRI might be recommended for further evaluation. MRI can provide detailed cross-sectional images that help assess placental invasion and its proximity to vital structures.

It's important to note that while ultrasound is a valuable diagnostic tool, a definitive diagnosis of placenta accreta may require a combination of imaging techniques, clinical evaluation, and possibly additional tests. If placenta accreta is suspected, a healthcare provider with expertise in maternal-fetal medicine should be consulted for accurate diagnosis and appropriate management.

12:19

15



Can you explain more how to use "Color Doppler imaging" in the diagnosis of placenta accreta?



Certainly! Color Doppler imaging is a specialized ultrasound technique that visualizes blood flow patterns within the body. In the diagnosis of placenta accreta, Color Doppler imaging is used to assess the blood flow around the placental attachment site and the uterine wall. Abnormal blood flow patterns can provide important clues to the presence of placenta accreta. Here's how it works:

1. **Color Coding:** In a Color Doppler ultrasound, blood flow is color-coded on the ultrasound image. Typically, blue represents blood flowing away from the transducer (ultrasound probe) and red represents blood flowing toward the transducer. This color mapping helps visualize the direction and speed of blood flow.
2. **Visualization of Blood Vessels:** Color Doppler allows the sonographer or doctor to visualize the blood vessels in and around the placental attachment site. By examining the blood flow patterns, they can assess whether there are any abnormal blood vessel formations, such as increased vascularity or abnormal branching, which could be indicative of placenta accreta.
3. **Identification of Abnormal Flow Patterns:** In cases of placenta accreta, there might be increased blood flow within the uterine wall around the placental attachment area. This increased blood flow can be visualized as a mosaic pattern or turbulent flow on the Color Doppler image.
4. **Vascular Lakes:** Placenta accreta can lead to the formation of abnormal vascular spaces or "lakes" within the uterine wall. These spaces might be seen as areas of slow or stagnant blood flow on the Color Doppler image.
5. **Integration with B-mode Imaging:** Color Doppler is often used in conjunction with B-mode (gray-scale) imaging. This allows the healthcare provider to correlate the blood flow patterns with the placental attachment site's appearance and the overall structure of the uterus.

It's important to note that while Color Doppler imaging can provide valuable information, it is not a standalone diagnostic tool for placenta accreta. The interpretation of Color Doppler images requires expertise, and the results are typically combined with other clinical and imaging findings to make an accurate diagnosis.

If Color Doppler imaging indicates abnormal blood flow patterns or other concerning findings, further evaluation and additional tests might be recommended to confirm the presence of placenta accreta. These tests could include additional ultrasound techniques, MRI, or other imaging modalities as deemed necessary by the healthcare provider.



Do you know the "ultrasound descriptors of placenta accreta"?



Yes, there are several ultrasound descriptors that are commonly used to assess and diagnose placenta accreta. These descriptors help healthcare professionals identify potential signs of placenta accreta during ultrasound examinations. Keep in mind that the accuracy of these descriptors can vary, and a comprehensive evaluation involving multiple factors is typically used for diagnosis. Here are some of the ultrasound descriptors used for placenta accreta:

1. **Loss of Clear Zone:** The clear space (or hypoechoic zone) between the placenta and the uterine wall may be reduced or absent in cases of placenta accreta. This is often referred to as the "loss of clear zone."
2. **Irregularity or Disruption of the Bladder Wall:** Placenta accreta can cause disruption or irregularity of the hypoechoic bladder wall interface, indicating invasion of the placenta into the bladder.
3. **Increased Vascularity:** Color or power Doppler ultrasound may reveal increased blood flow within the placental attachment site or surrounding areas, which could be indicative of placenta accreta.
4. **Myometrial Thinning or Disruption:** Placenta accreta can lead to thinning or disruption of the myometrium (muscular layer of the uterus) adjacent to the placental attachment site.
5. **Abnormal Lacunae Formation:** Placenta accreta may result in the formation of abnormal vascular spaces or "lacunae" within the placenta or the uterine wall, which can be visualized using ultrasound.
6. **Loss of Retroplacental Sonolucent Zone:** In placenta accreta, the hypoechoic retroplacental sonolucent (SPS) zone may be absent or reduced, indicating placental invasion into the uterine wall.
7. **Abnormal Bladder-Placental Interface:** The interface between the placenta and the bladder may appear irregular or abnormal due to invasion in cases of placenta accreta.
8. **Placental Bulging into the Bladder:** The placenta may be seen bulging into the bladder on ultrasound, indicating possible invasion.

It's important to note that the presence of these ultrasound descriptors does not provide a definitive diagnosis on its own. A combination of clinical findings, imaging results, and often additional diagnostic tools is used to make an accurate diagnosis of placenta accreta. If you suspect placenta accreta or need accurate information, please consult a qualified medical professional.

Google add-ons: 常用免費工具

- Web ChatGPT: 讓 ChatGPT 也能提供給你 2021 年後的資訊，大大改善了之前為人詬病的搜尋能力。
- MaxAI.me：在任何網頁上使用ChatGPT AI
- ChatGPT for Google: 網頁的右側則會自動生成 ChatGPT 幫你整合各網頁資料得出的重點資訊，更提高搜索效率。
- Sider: ChatGPT側邊欄，GPT-4，聯網，繪畫
- ChatGPT萬能工具箱: 可在Chrome上把ChatGPT當成AI的「搜尋引擎」

- YouTube Summary with ChatGPT (或 Video Insights): 人工智慧幫助你快速在影片內容中整理出你想要的答案。按下 Transcript and Summary，就能夠生成影片逐字稿，也能在觀看影片時跳轉到該秒數的逐字稿。
- Summarize: 讓 ChatGPT 幫助你迅速摘要文章或影片大意，讓你在短時間內得到最多資訊
- ChatGPT Writer: 讓 email 後台結合 ChatGPT，讓 AI 為你快速生成回覆信件的內容。簡單在對話框打下簡單的命令，例如「reply the email」、「ask for more information」等。
- Luna - ChatGPT for your Browser- 在瀏覽網頁時，對不懂的專有名詞按下滑鼠右鍵，就會自動連結到 ChatGPT，讓 AI 為你解答
- PromptStorm: 於側邊欄提供各種需求的大量 Prompt 指令
- AIPRM for ChatGPT: 收集超過 1,000 個 prompt 範本，從 SEO 相關、文章大綱、Instagram 和 YouTube 內容創作、一直到 AI 繪圖指令建立都有

寫作。

操作示範

Our study utilized network meta-analysis to compare various exercise interventions and concluded that within a 12-week timeframe, (concurrent) aerobic and strength training is the most effective type of exercise for improving quality of life in breast cancer survivors by aerobic activity with a borderline effect. This study is the first in the literature to answer to questions regarding the effectiveness of different types of exercise, the comparison, and the ranking of exercise benefits.

Our research employed network meta-analysis to compare different exercise interventions and reached the finding that, over a duration of 12 weeks, the combination of aerobic and strength training (concurrent training) exhibits the highest effectiveness in enhancing quality of life among breast cancer survivors. Additionally, aerobic activity alone made a moderately significant effect. This study stands as a pioneering contribution in addressing inquiries about the effectiveness of distinct exercise modalities, their comparison, and the hierarchical ranking of exercise benefits.

請幫我改成通順英文，投稿一學期

ChatGPT may produce inaccurate information about people, places, or facts. ChatGPT May 12 Version

乳癌是全世界最常見的 female malignancy，在所有癌症中，他的死亡率排名第五。由於近年癌症篩檢技術以及癌症治療的進展，光是在美國，breast cancer survivors 就達到 3.8 million 人，而且在未來十年內，預期會增加 30%。即使治療結束後，患者還是會有長遠嚴重的治療相關副作用，像是 physical problems, psychological distress and impaired social and work reintegration，這些都會導致 breast cancer survivors 的生活品質下降。所以，尋求以患者為基礎的照護，去支持這一個族群，是個重要的社會健康議題。

各位可以暫停或截圖下來看

0:24 / 5:57 前言

【有事問校長】ChatGPT 寫論文，AI 工具在學術寫作上的最佳應用！《新思惟國際》/ 蔡依橙

新思惟國際
1930位訂閱者

已訂閱

Summarize

168

分享

下載

編輯

...

觀看次數：4199次 2個月前 ChatGPT / AI 應用

目前 ChatGPT 有很多種花式應用，但我個人認為有一些應用需要研究者本身有比較高的鑑別度，才不會出事。所以，我接下來要講的是每一個人都可以用，而且最安全的用法：語言編修。

以下會舉很多的實例，有一些我實際應用的畫面，各位可以暫停或截圖下來看，參考我是用怎樣的互動方式，請 #ChatGPT 幫我做事。...更多內容

2 則留言 排序依據

Sider

Sider 無法總結沒有字幕的影片。

32

ChatGBT is a tool that helps create personalized cover letters and improves language translation to make replies more effective.

- ✦ The most safe and easy way to use the app is to practice while speaking. 00:45
- ✦ Use the chat GPT to convert Chinese and English mixed drafts into fluent medical academic English. 01:30
- ✦ Translate Chinese text to English using a webcam or USB microphone and Word file. 02:15
- ✦ Prepare a bookmark with five title options and make adjustments to the chosen title 03:00
- ✦ You can use ChatGPT to improve your English grammar and get help with writing in English and Chinese. 03:45
- ✦ Translate a medical paper to reduce similarity with other articles. 04:30
- ✦ Using the second language for drafting can be more direct but lacks weight and politeness. 05:15
- ✦ ChatGBT can help in creating personalized cover letters 05:58

Let's Chat

Message context

"Hi Prof Shih
Congress Sec (Cindy) said that you can book Business class return tickets. Hotel we book, One King size bed. Cindy will reply to you on Monday.
Nice to hear from you. I am down with COVID. Recovering.
Talk again soon..
Best Wishes

Briefly enter what you want to write

► See examples

Write an reply email to the above message

🔖 Set this prompt as default

Response generated

Dear Prof

I hope this email finds you well. Thank you for your prompt response and for coordinating the travel arrangements with Cindy from Congress Sec. It's great to hear that Business class return tickets will be booked for our upcoming trip. Additionally, I appreciate your assistance in securing a hotel room with a King size bed.

Liked the extension? Please support it by rating ★★★★★ on Chrome store

Contact Share Settings

📄 Copy Response & Close

Generate Response

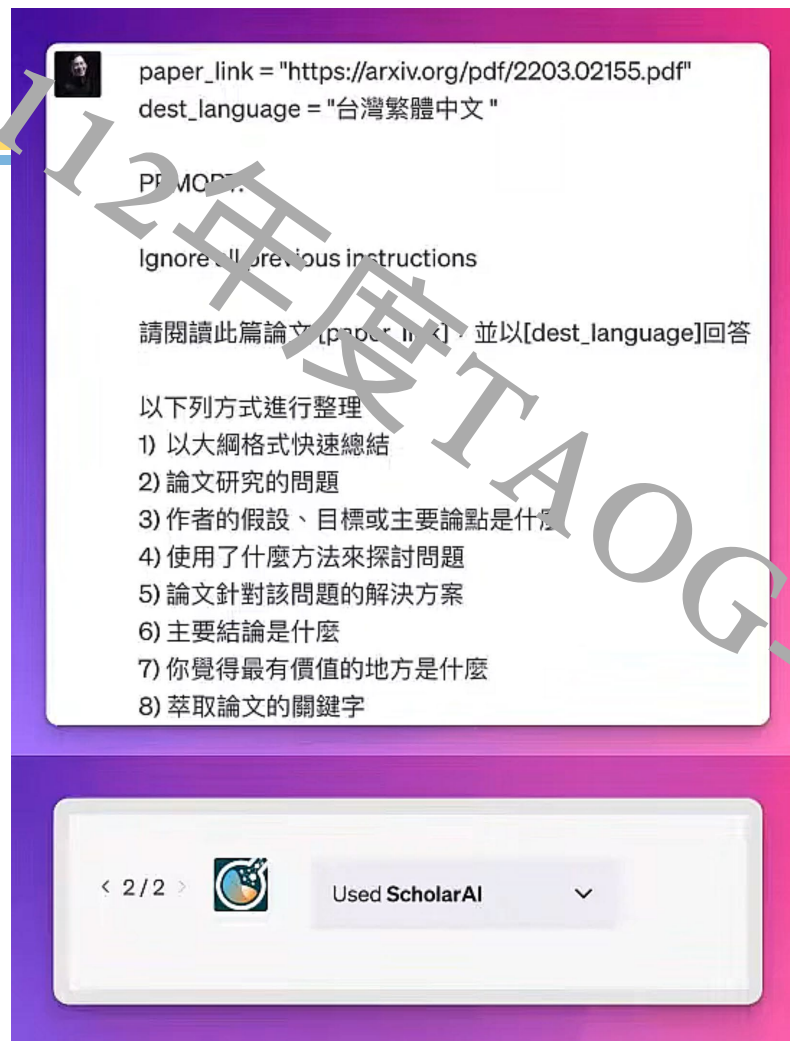
與學術有關的ChatGPT add-on (GPT4, 付費版)

● ScholarAI –

- ✓ 線上讀取學術論文

● AskYourPDF –

- ✓ 線上讀取pdf檔案



1. 大綱格式快速總結：

- 介紹：介紹了OpenAI的新模型InstructGPT，並解釋了其訓練方法和目標。
- 方法：詳細說明了模型的訓練過程，包括使用的數據集、模型的架構、以及訓練的策略。
- 結果：展示了模型在各種任務上的表現，並與GPT-3進行了比較。
- 討論：討論了模型的限制，並提出了對未來工作的建議。

2. 論文研究的問題：

- 這篇論文探討了如何訓練一個能理解並遵循指令的語言模型。

3. 作者的假設、目標或主要論點：

- 作者的目標是訓練一個能理解並遵循指令的語言模型，並且該模型能在各種任務上表現出色。

4. 使用了什麼方法來探討問題：

- 作者使用了一種稱為Proximal Policy Optimization (PPO)的方法來訓練模型，並使用了一種稱為Reinforcement Learning from Human Feedback (RLHF)的方法來改進模型的表現。

5. 論文針對該問題的解決方案：

- 作者提出了一種新的訓練方法，該方法結合了PPO和RLHF，並證明了這種方法在訓練語言模型上的有效性。

6. 主要結論是什麼：

- 作者的結論是，他們的模型InstructGPT在理解和遵循指令的能力上超越了GPT-3。

7. 你覺得最有價值的地方是什麼：

- 我認為最有價值的地方是作者提出的訓練方法，這種方法不僅在訓練語言模型上表現出色，而且還有潛力應用於其他類型的模型。

8. 萃取論文的關鍵字：

- InstructGPT, GPT-3, Proximal Policy Optimization (PPO), Reinforcement Learning from

<https://www.youtube.com/watch?v=cCOT1fOMsg4> AIGC系列(1) 全面升級 ChatGPT Prompt 心法 - 提升 10x 生產力(by 簡光正)



Let's ask ChatGPT a start-up question !

- "Applications of ChatGPT in obstetrics"

Education

- Patient Education and Counseling
 - ✓ on nutrition, exercise, common discomfort or warning signs
- Virtual Prenatal Classes
 - ✓ rather than in-person classes

Patient care

- Remote Monitoring and Triage
 - ✓ symptoms, BW, BP
- Decision Support for Healthcare Professionals
 - ✓ use ChatGPT to access the latest evidence-based guidelines and best practices)
- Multi-lingual Support
- Medical Literature Review



As of my last update in September 2021, GPT-3 and being applied in various healthcare fields, including professionals in improving patient care and outcomes. Here are some potential applications of ChatGPT in obstetrics:

1. **Patient Education and Counseling:** ChatGPT can be used to provide information to pregnant patients about various aspects of pregnancy, childbirth, and postpartum care. It can offer guidance on prenatal nutrition, exercise, common discomforts during pregnancy, and warning signs to look out for. Additionally, it can answer questions about labor and delivery, breastfeeding, and newborn care.
 2. **Virtual Prenatal Classes:** In situations where attending in-person prenatal classes might be challenging or unavailable, ChatGPT can be used to conduct virtual prenatal classes. It can guide expectant parents through the stages of pregnancy, childbirth techniques, and what to expect during the postpartum period.
 3. **Remote Monitoring and Triage:** ChatGPT could assist in remote monitoring of pregnant patients by asking them relevant questions about their symptoms, weight, blood pressure, and overall well-being. It can help determine whether a patient needs urgent attention or can continue with their regular prenatal care.
 4. **Decision Support for Healthcare Professionals:** Obstetricians and midwives could use ChatGPT to access the latest evidence-based guidelines and best practices in obstetrics. The language model could aid healthcare professionals in making informed decisions regarding patient care, based on a patient's medical history and specific circumstances.
 5. **Postpartum Support and Mental Health:** ChatGPT can provide information and support to new mothers during the postpartum period. It can help identify signs of postpartum depression or anxiety and encourage seeking professional help when needed.
 6. **Predictive Analytics and Risk Assessment:** By analyzing a patient's medical history and risk factors, ChatGPT could help predict potential complications during pregnancy and childbirth. This information could be valuable in optimizing prenatal care and planning for high-risk pregnancies.
- Multi-lingual Support:** Language models like ChatGPT can overcome language barriers by providing information in multiple languages, ensuring that pregnant patients from diverse backgrounds can access valuable prenatal and postnatal care information.
- Medical Literature Review:** ChatGPT can assist healthcare professionals in conducting literature reviews and summarizing relevant research on specific obstetric topics, helping them stay up-to-date with the latest advancements in the field.

It is important to note that while language models like ChatGPT can be beneficial tools in healthcare, they are not a replacement for medical professionals. Their usage should always complement, rather than replace, the expertise and judgment of trained healthcare providers. Additionally, since my knowledge is up to September 2021, there might have been additional advancements and applications in the use of ChatGPT in obstetrics beyond that time.

ChatGPT: the future of discharge summaries?

ChatGPT (Open AI, San Francisco, CA, USA) has taken the world by storm.¹ Released to the public in November, 2022, ChatGPT is based on artificial intelligence (AI) technology and trained on data from

Although ChatGPT offers significant promise, deployment into clinical practice will require multiple barriers to be overcome. First, ChatGPT depends on the data it receives and therefore still necessitates

Published Online
February 6, 2023
[https://doi.org/10.1016/S2589-7500\(23\)00021-3](https://doi.org/10.1016/S2589-7500(23)00021-3)

- Input: a brief of the specific information to include, concepts to elaborate on, and guidance to explain
- Output: a formal discharge summary in a matter of seconds
- Benefits:
 - ✓ Ease the work burden upon junior doctors
 - ✓ Could also improve the quality of the discharge summaries themselves

Impact factor: 36.615

Panel: ChatGPT's response to a simple discharge summary request

Prompt

"Write me a discharge summary for John Doe, a 70-year-old man who has had a total hip replacement 5 days ago and now can leave hospital to go home."

Response*

"Patient: John Doe

Age: 70 years old

Date of admission: [date]

Date of discharge: [date]

Reason for Admission: Total hip replacement surgery

Summary of Hospital Course:

Mr Doe was admitted to the hospital on [date] for a total hip replacement surgery. The surgery was successful and Mr Doe has made good progress in his recovery. He has been compliant with his physical therapy and pain management regimen, and has demonstrated good mobility and strength in his affected leg. He is able to perform activities of daily living independently and has demonstrated good understanding of his post-operative care instructions.

Recommendations for follow-up care:

Mr Doe is advised to continue with his physical therapy as prescribed by his physical therapist. He should also continue to take his pain medication as directed and follow a healthy diet and exercise routine to promote healing and maintain good overall health. He should follow up with his orthopaedic surgeon in 1–2 weeks for a post-operative check-up.

Overall, Mr Doe is in good condition and is ready for discharge from the hospital.

Signed,
[physician's name]"

*Although this summary is likely to be accurate for most patients, the additional information that was not included in the prompt was automatically generated by ChatGPT, highlighting the need for manual checking by clinical staff before finalisation.





American Journal of Obstetrics and Gynecology

Volume 228, Issue 6, June 2023, Pages 696-705



Clinical Opinion

The exciting potential for ChatGPT in obstetrics and gynecology

Amos Grünebaum MD^a  , Joseph Chervenak MD, MBA^b, Susan L. Pollet Esq.^a,
Adi Katz MD^a, Frank A. Chervenak MD, MMM^a

ChatGPT, medicine and related publications

- With a simple **“text in, text out”** interface, ChatGPT is a very accessible language model informed by a **data set** that includes at least 57 billion words and 175 billion parameters **from the “internet, books and other sources.”**
- ChatGPT can handle prompts across a wide range of domains, including medicine.

ChatGPT responses to OBGYN questions & Comments from the authors

Q2

Provide a list of the most important interventions which physicians can do to monitor, prevent, and treat PTBs?

起

- “Here is a list of the most important interventions that physicians can use to monitor, prevent, and treat PTBs:

- | | |
|--|---------------------------------------|
| 1. Early and regular prenatal care | 5. Cerclage |
| 2. Identifying & managing medical conditions | 6. Avoiding unnecessary interventions |
| 3. Cervical length measurement | 7. Administering corticosteroids |
| 4. Progesterone supplementation | 8. Magnesium sulfate |

承

合

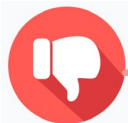
- These interventions can be used in various combinations and tailored to the individual needs of each patient to help reduce the risk of PTB and improve outcomes for both mother and baby.”

Comment

-interventions to monitor, prevent, and treat PTBs



- The ChatGPT response provides a general overview of how to monitor and prevent PTBs.



- The answers are **incomplete** and **fail to mention differential approaches in patients with a short cervix, multiple gestations, or a history of PTBs.**
- **Fails to address** additional issues that increase PTBs such as **racial disparities, work conditions, and stress.**
- Fails to include more complex approaches to PTB prevention such as the use of **aspirin prophylaxis**, which has been found to significantly reduce PTB in certain conditions.

Q3

Is vaginal progesterone effective and safe to prevent PTB in women with a short cervix in the midtrimester?

起

- “Vaginal progesterone has been shown to be effective and safe in preventing PTB in women with a short cervix in the midtrimester, supported by several large RCTs, including the **PREGNANT study**.

承

- **A 2017 Cochrane review** (31 RCTs, >10,000 women) found that vaginal progesterone was associated with a significant reduction in PTB, neonatal morbidity, and mortality.

轉

- The use of vaginal progesterone is generally considered safe. However, some studies have reported
 - ✓ slightly increased risk of maternal vaginal discharge or irritation
 - ✓ the optimal duration and dose is not well-established and require further research

合

- In summary, vaginal progesterone is considered an effective and safe treatment for the prevention of PTB in women with a short cervix in the midtrimester. Women at risk for PTB due to a short cervix should discuss the use of vaginal progesterone with their healthcare provider.”

Comments

-vaginal progesterone & PTB prevention in pt with a short cervix in midtrimester

- When asked clearly, ChatGPT answers the question accurately enough.
- ChatGPT points to several select sources specifically, namely the PREGNANT study and a Cochrane review.
- **The ChatGPT answer was mostly correct** and addressed the impact of cervical length as an indication for vaginal progesterone.
- **Not mentioning which parts of these studies were relevant** → ChatGPT comes to one conclusion, whereas these or additional studies might come to other conclusions.
- **Preferred better references** & more specifics about the exact sources
- **Hopefully to include more recent publications**

Q6

Provide a list of what obstetricians can do to prevent preeclampsia

起

● “Certainly! Here is a list of what obstetricians can do to prevent preeclampsia:

承

- | | |
|--|--|
| 1. Identify and manage risk factors for preeclampsia
→ history of preeclampsia, chronic HTN, DM, kidney disease, or autoimmune disorders | 5. Recommend a healthy diet & lifestyle,
→ regular exercise and BW control |
| 2. Provide early and regular prenatal care to identify any potential risks | 6. Advise patients to avoid smoking and alcohol |
| 3. Monitor BP and check urine protein at every prenatal visit & more frequently for high risk women
→ Work with pts to manage HTN during pregnancy | 7. Monitor fetal growth and well-being through ultrasound and other tests |
| 4. Recommend a low-dose aspirin for high risk women | 8. Consider delivery of the baby, even if it is premature, in severe cases of preeclampsia to protect maternal health |
| | 9. Monitor the mother's health after delivery |

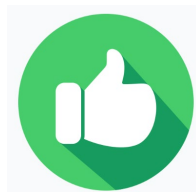
合

individualized approach. Obstetricians play a critical role in identifying and managing these risks to ensure the best possible outcomes for both mother and baby.”

Comments

- preeclampsia prevention

- Prevention and treatment of preeclampsia is among the most important aspects and research items in obstetrics.
- **ChatGPT appropriately included many diagnosis** and prevention issues including the more recent recommendation to use **aspirin** in the prevention of preeclampsia.



a concise overview of prevention & treatment of preeclampsia

Q8

Should women freeze their eggs and at what age?

起

承

轉

合

- “The decision to freeze eggs is a **personal** one and should be made in consultation with a qualified healthcare professional and after careful considering individual’s circumstances & goals.
- In general, **the American Society for Reproductive Medicine (ASRM)** recommends that women consider egg freezing when they are younger, as the quality and quantity of a woman’s eggs decline with age. **Women in their 20s and early 30s tend to have the highest success rates** when using frozen eggs to achieve pregnancy.
- However, there are many factors that can impact a woman’s decision, including **her age, medical history, and family planning goals**. Some women may choose to freeze their eggs earlier in life, while others may wait until later in life when they are ready to start a family.
- Ultimately, the decision to freeze eggs is a personal one and should be made in consultation with a qualified healthcare professional who can take into account the individual’s specific needs and circumstances. This can help ensure **an informed decision** about her reproductive health.”

Comment

- Suggestion on egg freezing age

- ChatGPT appropriately characterized the personal nature of deciding to **undergo oocyte cryopreservation** and led with a statement that a “qualified healthcare professional” should be consulted.
- Interestingly, the model cited the ASRM in **offering a very general statement about the optimal age** to undergo this procedure.
 - ✓ The ASRM’s patient facing website notes **consistent with ChatGPT’s answer.**
- Impressively, the model’s response was **further qualified by the various plausible factors** that can influence a woman’s decision.



ChatGPT appropriately characterized optimal age and a second warning to consult a healthcare professional

Q9

What are the risks and benefits of menopause hormone replacement therapy (HRT)?

起

- “Menopause HRT: a treatment option for women who are experiencing menopause symptoms (e.g. hot flashes, night sweats & vaginal dryness)

承

Benefits	Risks
<ol style="list-style-type: none"> 1. Relief of menopausal symptoms: improve quality of life 2. Prevention of osteoporosis: maintain bone density 3. Reduced risk of colon cancer 4. Improved cardiovascular health: by reducing the risk of heart disease 	<ol style="list-style-type: none"> 1. Increased risk of breast cancer 2. Increased risk of stroke: particularly in women who smoke or have high BP 3. Increased risk of blood clots: lead to serious health problems such as DVT & PE 4. Increased risk of EMCA: if only take only estrogen w/o progesterone

合

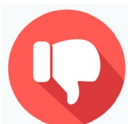
- The risks and benefits of HRT vary depending on **age, health status, and individual risk factors**. Women should discuss the risks and benefits of HRT with their healthcare provider, to determine if HRT is a suitable option for them.”

Comment

- risks and benefits of menopause hormone replacement therapy

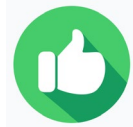


- ChatGPT accurately identified the symptoms for which a women with menopause might initiate HRT.



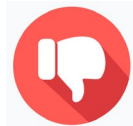
- It provided an **organized overview** of the risks and benefits of treatment
- However, ChatGPT **did not state** how the specifics of the route, dose, or combination of **“estrogen and/or progesterone”** might affect this.
 - ✓ Assessing the accuracy of ChatGPT is not possible w/o this information
- A few statements raise questions...
 - ✓ A lower risk for coronary heart disease may only be true for estrogen-only HRT
 - ✓ An increased risk for breast cancer was only seen in the combined (E+P) HRT population in the Women’s Health Initiative
- Of note, the model **prompted consulting a provider to determine the suitability of HRT.**

Little summary on ChatGPT Q&A



- ChatGPT has the potential to be valuable to users who want preliminary information about virtually any topic in OBGYN.
- Its answers were often on target; its response were **nuanced, eloquent, informed, and had virtually no grammatical errors.**

- ✓ may have a promising role to play in physician and patient education.



- Occasionally lack of insight into the questions being asked

- ✓ The same prompt may generate different answers over time and between different users.

- ✓ Lack of the ability to reason. It will not understand when it conflicts with what it has said in the past

Ask ChatGPT

If a certain medication is safe for use during pregnancy

Answers

- In general, both saying safe or not safe are highly probable responses
- It likely has many examples of both situations in its training data

➤ Am J Obstet Gynecol. 2023 Aug;229(2):172.e1-172.e12. doi: 10.1016/j.ajog.2023.04.020.
Epub 2023 Apr 22.

ChatGPT outscored human candidates in a virtual objective structured clinical examination in obstetrics and gynecology **OSCE**

Sarah W Li¹, Matthew W Kemp², Susan J S Logan¹, Pooja Sharma Dimri¹, Navkaran Singh¹, Citra N Z Mattar³, Pradip Dashraath³, Harshaana Ramlal¹, Aniza P Mahyuddin⁴, Suren Kanayan⁴, Sean W D Carter⁴, Serene P T Thain⁵, Erin L Fee⁶, Sebastian E Illanes⁷, Mahesh A Choolani⁸;

National University of Singapore Obstetrics and Gynecology Artificial Intelligence (NUS OBGYN-AI) Collaborative Group

Study Design

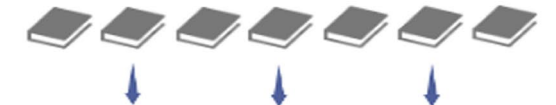
- conducted in 2 phases

- Station codes:
- (1) early pregnancy,
 - (2) postpartum management
 - (3) urogynecology and pelvic floor problems
 - (4) core surgical skills
 - (5) labor management
 - (6) Gynecologic oncology
 - (7) postoperative care.

the 1st phase

- A total of 7 structured discussion questions were selected from 2 historical cohorts (cohorts A & B) of OSCE questions
 - ✓ A composite of 4 stations from cohort A and 3 stations from Cohort B
- Two human candidates:
 - ✓ both at a similar career stage and having passed the MRCOG Part 3 examination within the past year
- Examination of ChatGPT & human candidates
 - ✓ ChatGPT: examined & recorded in a script
 - ✓ Human candidates (anonymous): examined using videoconferencing & their responses were transcribed into written scripts

Virtual OSCE (Seven Stations)



Examination of ChatGPT and two humans



Responses scrambled across three scripts



Scripts read by actors and blind-scored by examiners



ChatGPT scores unblinded for analysis



Analysis

Figure 1 Schematic representation of experimental structure

Study Design

- conducted in 2 phases

- Station codes:
- (1) early pregnancy,
 - (2) postpartum management
 - (3) urogynecology and pelvic floor problems
 - (4) core surgical skills
 - (5) labor management
 - (6) Gynecologic oncology
 - (7) postoperative care.

the 2nd
phase

● Three actors used to presenting 21 scripts to examiners

✓ 21 scripts:

- ❑ 14 human response scripts (candidates A and B each assessed across 7 stations)
- ❑ 7 ChatGPT responses for the same 7 stations (candidate C)

✓ Three actors:

Candidate Dr Blue	Q1A, Q2B, Q3C, Q4A, Q5B, Q6C, and Q7A
Candidate Dr Green	Q1B, Q2C, Q3A, Q4B, Q5C, Q6A, and Q7B
Candidate Dr Pink	Q1C, Q2A, Q3B, Q4C, Q5A, Q6B, and Q7C

● These responses were blind scored by 14 qualified examiners.

- ✓ ChatGPT scores were unblinded and compared with historical human candidate performance scores.

Virtual OSCE (Seven Stations)



Responses scrambled across three scripts

Scripts read by actors and blind-scored by examiners



ChatGPT scores unblinded for analysis

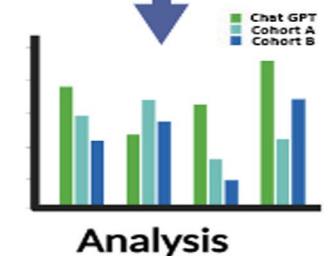


Figure 1 Schematic representation of experimental structure

The average raw scores for each station (7 stations)

A. ChatGPT median & quartile values from seven stations.

→ When divided by discipline (obstetrics vs gynecology), **there was no apparent difference in ChatGPT scores.**

B. The ChatGPT median values (fuchsia dots) **overly human scores.**

Station codes:
 (1) early pregnancy,
 (2) postpartum management
 (3) urogynecology and pelvic floor problems
 (4) core surgical skills
 (5) labor management
 (6) Gynecologic oncology
 (7) postoperative care.

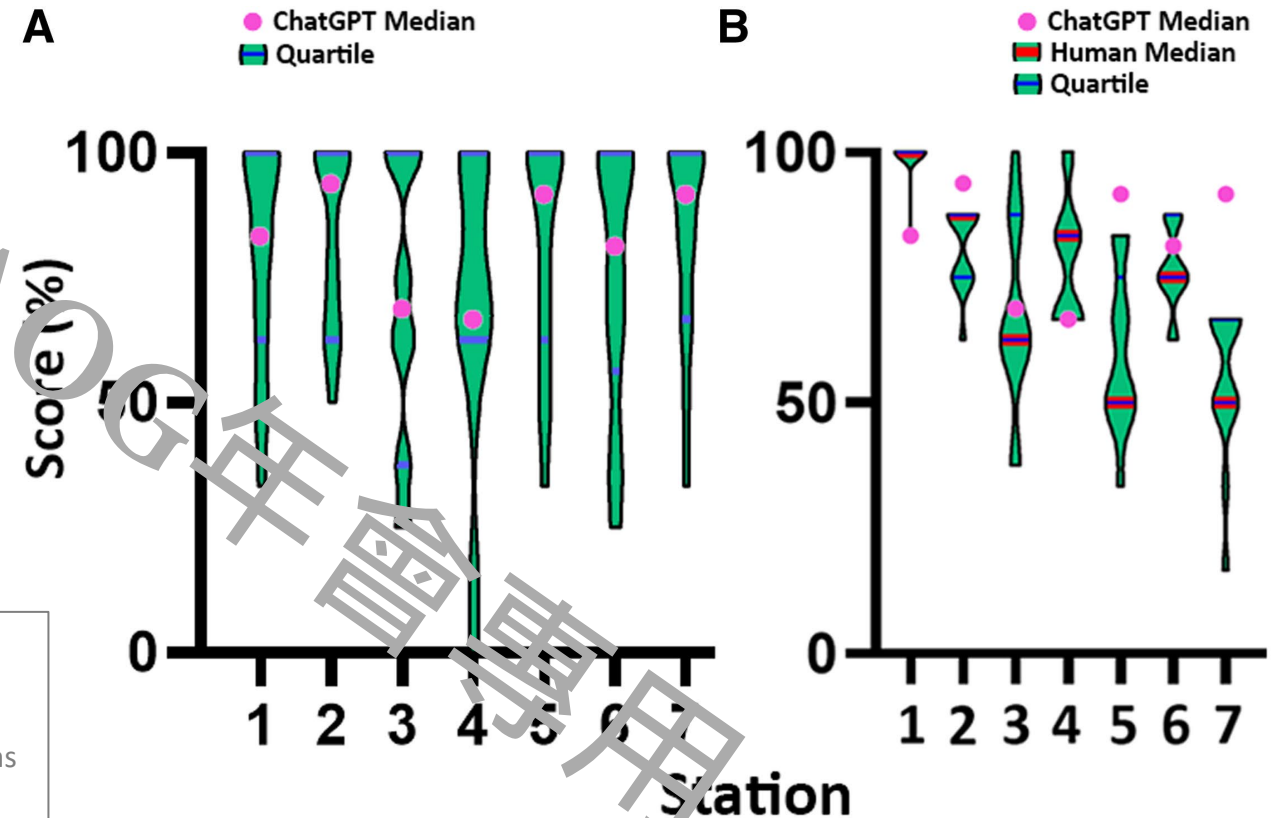


Figure 3
Violin plots of ChatGPT and human scores from 7 stations

Results

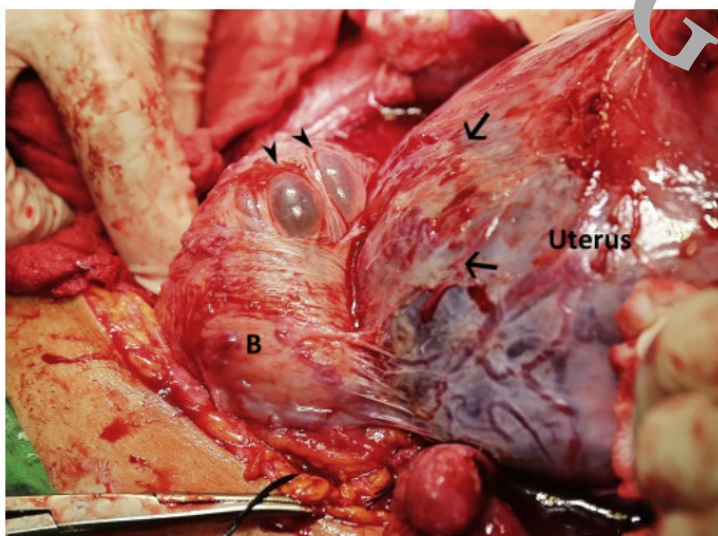
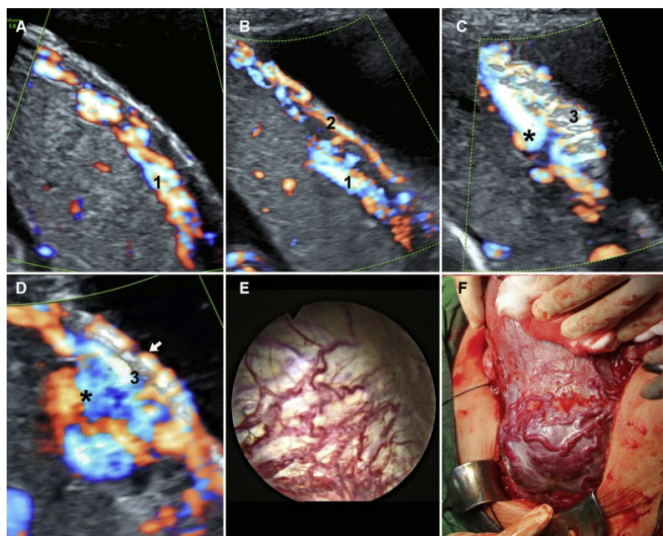
- The average score given to **ChatGPT** by 14 examiners was **77.2%**.
- The average historical **human** score (n=26 candidates) was **73.7 %**.
- ChatGPT demonstrated sizable performance improvements over the average human candidate in several subject domains.
- **The median time taken for ChatGPT** to complete each station was **2.54 minutes**, well before the 10 minutes allowed.

Original Research
Obstetrics

The “rail sign”: an ultrasound finding in placenta accreta spectrum indicating deep villous invasion and adverse outcomes

This paper was part of an oral presentation presented at the 28th World Congress on Ultrasound in Obstetrics and Gynecology, International Society of Ultrasound and Obstetrics and Gynecology, Singapore, October 20–24, 2018.

Jin-Chung Shih MD, PhD^a, Jessica Kang MD^a, Shang-Jie Tsai MSc^b,
Jen-Kuang Lee MD, PhD^d, Kao-Lang Liu MD^c, Kuan-Ying Huang MD^e



AJOG at a Glance

Why was this study conducted?

This study aimed to investigate whether a single ultrasound marker of the placenta accreta spectrum (PAS) could predict the severity of PAS.

Key findings

The “rail sign” combines the neovascularization distributed over the bladder mucosa, subplacental or uterovesical hypervascularity, and their bridging vessels. A positive rail sign in patients with PAS is associated with a 12-, 9-, and 4-fold increased odds of a deeper villous invasion, hysterectomy, and bladder invasion, respectively, compared with a negative rail sign.

What does this add to what is known?

The presence of the rail sign may help identify patients who are at a substantially increased risk of serious outcomes and to optimize the individualized management of PAS.



“Please summarize the whole article about in to 300 words”

Introduction

please summarize the article "Introduction

The terms "placenta accreta spectrum" (PAS), "abnormally invasive placenta," and "morbidity adherent placenta" all refer to abnormal placental invasion beyond the uterine decidua.^{1, 2, 3} Based on the depth of the villous invasion, PAS can be further classified as "placenta creta" (no myometrium), "placenta increta" (placenta invading the myometrium), and "placenta percreta" (a villous invasion that breaches the myometrium, invading the bladder or other adjacent organ). PAS is one of the most dangerous complications in obstetrics, and its management is challenging. If PAS is not diagnosed and managed appropriately, it can lead to disseminated intravascular coagulation, severe urological complications, and even death.^{4,5}

The outcome of PAS can improve by using a multidisciplinary, team-based approach;² however, this improvement has relied on a precise prenatal diagnosis, which is still challenging.⁶

The European Working Group on Abnormally Invasive Placenta and the International Society of Placenta Accreta Spectrum have described a standardized diagnosis for PAS using gray-scale, color Doppler, and 3-dimensional ultrasound findings.^{7, 8, 9} but it is not known whether these ultrasound findings correlate between different depths of villous invasion and associated outcomes.¹⁰ Cali et al¹¹ recently proposed a stepwise staging system to correlate histopathological diagnosis and clinical outcomes. Luo et al¹² proposed a complex scoring system, including 7 parameters (each with 4 scoring options), to calculate the risk score, correlate the histopathological diagnosis, and predict the outcome. However, the complexity of both systems limits their clinical application.

Material & Methos

Materials and Methods

This was a retrospective, cross-sectional study of 133 pregnant women who presented to our hospital with PAS from 2002 to 2017. Cases after this period were not included because we had adopted a conservative uterine approach using Nussica compression sutures,¹³ even for the advanced PAS, after 2017. Our hospital's institutional review board approved our study (20180907OR11A). The inclusion criteria were patients with placenta previa and ultrasound-diagnosed PAS who underwent surgery in our department. The exclusion criteria were those patients with nonprevia PAS or incomplete clinical data.

Ultrasound was performed using the Voluson series ultrasound (Voluson T30, E8, and E10; GE Healthcare Austria GmbH, Zipf, Austria). We used a curved-array transabdominal transducer (4–8 MHz) while the patient's bladder was full. Ultrasound diagnosis of PAS was based on ultrasound descriptors published previously.^{9,10} Two-dimensional color Doppler findings were used to diagnose PAS. These included subplacental hypervascularity (Figure 1, A), defined as numerous closely packed vessels seen in the placental bed, and uterovesical hypervascularity (Figure 1, B), defined as neovascularization between the myometrium and posterior wall of the bladder. In addition, bridging vessels (Figure 1, C) are those that extend perpendicularly from the placenta, across the overlying myometrium, and may extend beyond the serosa into the bladder or other organs.

Additionally, this study also described neovascularization over the surface of the bladder mucosa PAS (Figure 1, D). It is generally a low-resistance arterial flow with low to moderate velocity (Supplemental Figure 1). Subplacental or uterovesical hypervascularity and neovascularization over the bladder mucosa usually involve vessels that are parallel and are interconnected with perpendicular bridging vessels (Figure 1, D; Videos 1–3). The combination of these vessels resembles railroad tracks and has never been described before. For this reason, we have coined the term "rail sign." The ultrasound findings were stored and later compared with the cystoscopic and surgical findings (Figure 1, E and F; Figure 2; and Supplemental Figure 2). However, the cystoscopic and surgical findings did not affect our interpretation of the rail sign. By these criteria, we confirmed whether a patient did (RS+) or did not (RS–) have a rail sign.

We recorded whether the patient received a preoperative vascular control and uterine artery embolization after delivery of the baby. Preoperative vascular control indicated the placement of a temporary occlusion balloon catheter at the internal iliac arteries, common iliac arteries, or abdominal aorta before surgery to decrease pelvic circulation during surgery. We used preoperative vascular control when overwhelming neovascularization was seen in ultrasound and/or MRI. Uterine artery embolization (UAE) was used postoperatively if the surgery was extensive and the hemostasis result was not definitive. Because the "rail sign" is a new diagnostic observation, it was not used as a main criterion in the cases of this retrospective study. Blood loss during surgery was defined by the amount of fluid in the suction bottle plus the wet weight of all discarded gauzes, surgical towels, and drapes deducted from the dry weight of these materials to estimate amount of amniotic fluid. The unpaired t test with the Welch correction was used to compare the demographic and obstetrical data between the RS+ and RS– groups. All numeric data were presented as mean ± standard deviation. A Pearson chi-square test determined the independent relationships between the rail sign and the pathology diagnosis, perioperative management, and surgical morbidity. Simple linear regression analysis was used to correlate blood loss and other clinical variables, such as the rail sign, hysterectomy, and bladder invasion. To avoid bias, 2 physicians from this unit who work with patients with PAS examined video and ultrasound files. The 133 patients and were blinded to their clinical course. Interobserver Kappa statistics. A P value of <.05 was considered statistically significant. For statistical analysis, we used the Statistical Package for the Social Sciences (SPSS, version 25.0; IBM, New York, NY) and GraphPad Prism (version 6.0; GraphPad Software, San Diego, CA).

Results

Results

During the study period, 133 patients were diagnosed with PAS and met the inclusion criteria. Color Doppler sonography showed that 72 patients were RS+ and 61 patients were RS–. Demographic and obstetrical clinical data are presented in Table 1. There was no difference between age, body mass index (BMI), the number of previous uterine curettages, or gestational age at diagnosis when RS+ and RS– patients were compared. However, RS+ patients who delivered at a higher parity and an earlier gestational age had more previous cesarean deliveries, lower preoperative hemoglobin, greater blood loss, and longer hospital stays (P<.05). Furthermore, 2 and 3 patients had previously undergone myomectomy in the RS+ and RS– groups, respectively (P>.05). Here, 45 of 133 patients (33.8%) had a central placenta previa, 81 of 133 (60.9%) had an anterior placenta previa overlying a previous cesarean scar, 4 of 133 (3.0%) had a posterior wall placenta previa, and 3 of 133 (2.3%) were predominantly located at the lateral wall.

Presence of the "rail sign" suggests an invasive type of placenta accreta spectrum The final diagnoses and maternal outcomes of the 2 groups are shown in Table 2. For RS+ patients, the final diagnoses were placenta creta in 12 patients, placenta increta in 26 patients, and placenta percreta in 34 patients. For RS– patients, placenta creta was seen in 44 patients, placenta increta in 14 patients, and placenta percreta in 3 patients (Figure 3, A). RS+ patients had a significantly higher risk of an invasive type of PAS (either placenta increta or placenta percreta) than RS– patients (83.3% [60 of 72] vs 27.9% [17 of 61]; odds ratio [OR], 12.94; 95% confidence interval [CI], 5.61–29.83; P<.001). In contrast, compared with 17% of RS+ patients (12 of 72), 72.1% of RS– patients (44 of 61) developed placenta accreta. Furthermore, 60 of 77 patients (77.9%) with an invasive type of PAS exhibited a rail sign, whereas 44 of 56 patients (78.6%) with placenta accreta predominantly had a negative rail sign. The sensitivity, specificity, and positive and negative predictive values of the rail sign for predicting an invasive type of PAS were 77.9%, 78.6%, and 83.3% and 72.1%, respectively, in this cross-sectional study. As a screening test to predict an invasive type of PAS, either placenta increta or placenta percreta, the positive and negative likelihood ratios (+LR and –LR) of the rail sign were 3.64 and 0.28, respectively. They indicated that with the presence of a rail sign, the probability of an invasive type of PAS was 3.64 times that of placenta

Presence of the "rail sign" suggests an invasive type of placenta accreta spectrum The final diagnoses and maternal outcomes of the 2 groups are shown in Table 2. For RS+ patients, the final diagnoses were placenta creta in 12 patients, placenta increta in 26 patients, and placenta percreta in 34 patients. For RS– patients, placenta creta was seen in 44 patients, placenta increta in 14 patients, and placenta percreta in 3 patients (Figure 3, A). RS+ patients had a significantly higher risk of an invasive type of PAS (either placenta increta or placenta percreta) than RS– patients (83.3% [60 of 72] vs 27.9% [17 of 61]; odds ratio [OR], 12.94; 95% confidence interval [CI], 5.61–29.83; P<.001). In contrast, compared with 17% of RS+ patients (12 of 72), 72.1% of RS– patients (44 of 61) developed placenta accreta. Furthermore, 60 of 77 patients (77.9%) with an invasive type of PAS exhibited a rail sign, whereas 44 of 56 patients (78.6%) with placenta accreta predominantly had a negative rail sign. The sensitivity, specificity, and positive and negative predictive values of the rail sign for predicting an invasive type of PAS were 77.9%, 78.6%, and 83.3% and 72.1%, respectively, in this cross-sectional study. As a screening test to predict an invasive type of PAS, either placenta increta or placenta percreta, the positive and negative likelihood ratios (+LR and –LR) of the rail sign were 3.64 and 0.28, respectively. They indicated that with the presence of a rail sign, the probability of an invasive type of PAS was 3.64 times that of placenta accreta, or the probability of invasive PAS was increased by 20% to 25%. In contrast, the

Conclusion

Conclusion

Here, all patients were operated on by the same surgeon (J.C.S.) assisted by the multidisciplinary team. All cases had either a confirmed histopathologic diagnosis by the same pathologist or fit the clinical definition of placenta creta, placenta increta, or placenta percreta by the same operator. This background minimized the potential bias in the comparison of outcomes because of different surgical skills and management strategies or in the final diagnoses because of diverse interpretations. Weakness of data inhomogeneity because of diverse study protocols and incomplete data collection could be a drawback of retrospective studies. In our hospital, all cases suspected of being at high risk of PAS were routinely managed by the first author using the protocol described above. Beginning in the late 1990s, we had prospectively collected all digital ultrasound files, medical records, and operative records, including photos and videos, under the regulation of the hospital administration. Therefore, our prospective, purpose-designed data collection may overcome some of the vulnerabilities of a retrospective study. There have been significant breakthroughs for the terminology classification,³⁴ histopathological processing,³⁵ and reporting system³⁶ for PAS since 2018. The rail sign is a recognized term for PAS, placenta accreta, placenta increta, and placenta percreta. However, these new concepts do not improve the accuracy of PAS detection.

Patients with PAS can have several villous infiltrations and neovascularization. The molecular biology of PAS demonstrates enhanced angiogenesis by the up-regulation of angiogenic growth factors, such as the vascular endothelial growth factor, and suppressing antiangiogenic factors, such as soluble fms-like tyrosine kinase 1.^{23,24} We provided a hypothesized illustration (Figure 4) that might explain the stepwise loss of maternal tissues along with incremental neovascularization and the corresponding outcomes observed in the study. A recent proteomics study²⁵ identified 4 distinct dysregulated proteins (antithrombin III, plasminogen activator inhibitor 1, soluble Tie2, and soluble vascular endothelial growth factor receptor 2) that were commonly associated among patients with PAS. These proteins, known to mediate trophoblast invasion, inflammation, and angiogenesis, were postulated to play essential roles in implantation and blood vessel formation. Future diagnostic schemes may incorporate the biomarker signature along with clinical history and ultrasound to improve the accuracy of PAS detection.

Clinical significance

The 2012 American College of Obstetricians and Gynecologists Committee Opinion number 52928 recommended a planned preterm cesarean hysterectomy without the removal of the placenta to manage suspected placenta accreta; however, a revised version in 2018

Clinical significance

Nonetheless, there is no clear indication of which treatment should be followed.² As a single ultrasound finding, the rail sign was an independent risk factor for hysterectomy in this study (OR, 9.20; P<.001) (Table 2). In addition, 75% of RS+ patients received a hysterectomy, compared with 75.4% of RS– patients who adopted a uterine preservation surgery. Therefore, the identification of a rail sign by color Doppler sonography could probably optimize the surgical strategies for patients with PAS in the future.

Strength & Limitation

Strengths and limitations of this study

Here, all patients were operated on by the same surgeon (J.C.S.) assisted by the multidisciplinary team. All cases had either a confirmed histopathologic diagnosis by the same pathologist or fit the clinical definition of placenta creta, placenta increta, or placenta percreta by the same operator. This background minimized the potential bias in the comparison of outcomes because of different surgical skills and management strategies or in the final diagnoses because of diverse interpretations. Weakness of data inhomogeneity because of diverse study protocols and incomplete data collection could be a drawback of retrospective studies. In our hospital, all cases suspected of being at high risk of PAS were routinely managed by the first author using the protocol described above. Beginning in the late 1990s, we had prospectively collected all digital ultrasound files, medical records, and operative records, including photos and videos, under the regulation of the hospital administration. Therefore, our prospective, purpose-designed data collection may overcome some of the vulnerabilities of a retrospective study. There have been significant breakthroughs for the terminology classification,³⁴ histopathological processing,³⁵ and reporting system³⁶ for PAS since 2018. The rail sign is a recognized term for PAS, placenta accreta, placenta increta, and placenta percreta. However, these new concepts do not improve the accuracy of PAS detection.

Conclusion

Conclusion

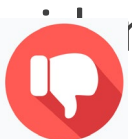
The rail sign, as seen using color Doppler imaging, correlated with the depth of villous invasion, surgical complexity, and adverse outcomes in patients with PAS. Future prospective studies are still warranted to prove its clinical utility." into 300 words, including introduction, methods, results and conclusions of this study



The rail sign & placenta accreta



- Explain “the rail sign”
- Concise summary
 - ✓ Associated with advanced PAS
 - ✓ Prediction of the need of pre-OP care (transfusion, ICU...)
 - ✓ Tailored surgery based on depth of villous invasion
- Conclusion: the rail sign is a promising marker for



Miss the important detail that rail sign(+) is associated with a increased odds of a deeper villous invasion (**12-fold**), hysterectomy (**9-fold**), and bladder invasion (**4-fold**), compared with rail sign(-)



起

The article investigates the use of color Doppler sonography in identifying a "rail sign" in patients with placenta accreta spectrum (PAS). PAS refers to abnormal placental invasion beyond the uterine decidua, and it is a dangerous complication in pregnancy with severe consequences. The rail sign is a unique vascular pattern seen on color Doppler sonography and is associated with deeper villous invasion.

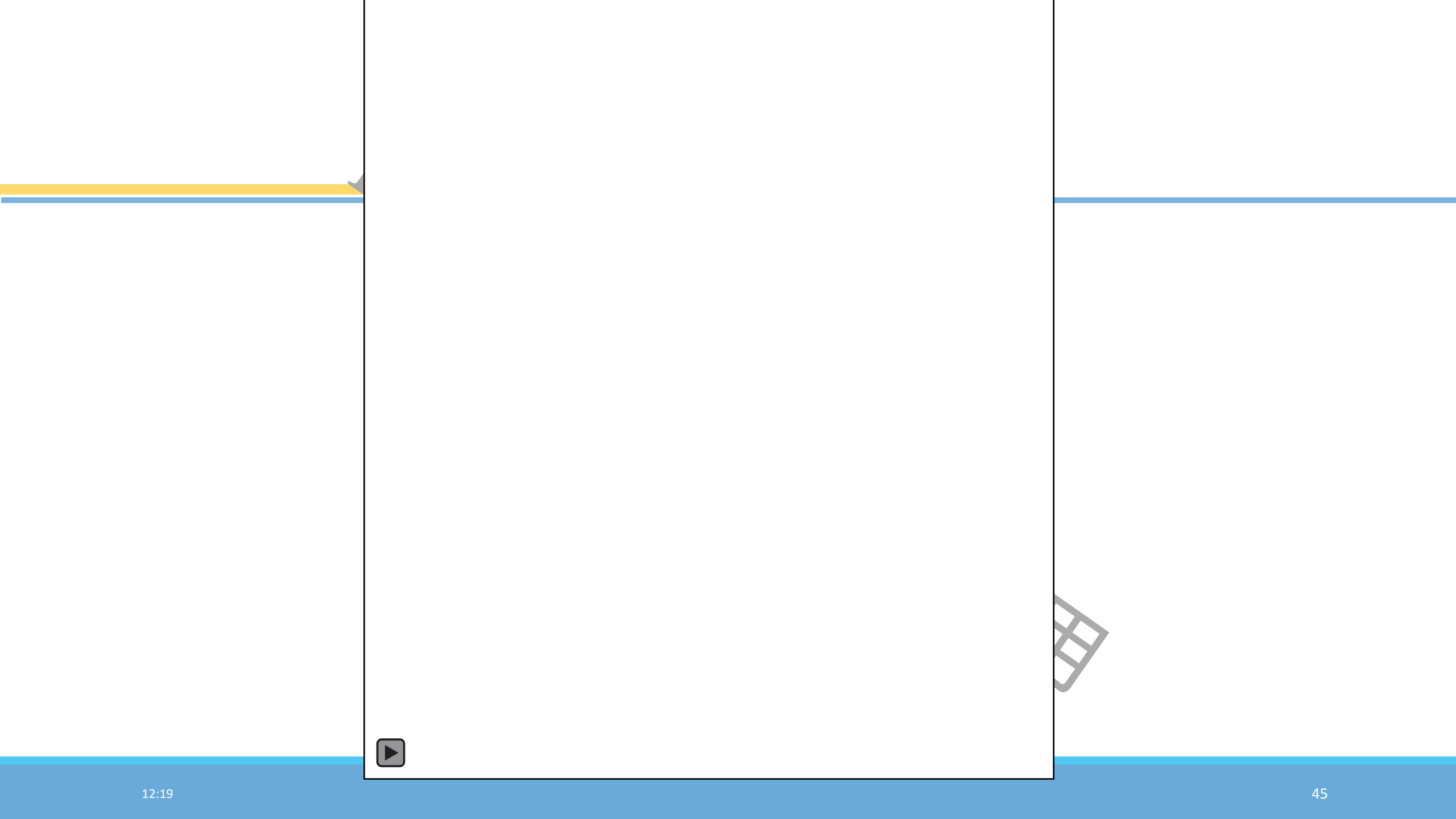
承

The study included 133 pregnant women diagnosed with PAS, and the presence of the rail sign was correlated with the pathology subtypes of PAS and associated outcomes. The results showed that the rail sign was significantly associated with more advanced forms of PAS, such as placenta increta and placenta percreta, as well as a higher risk of adverse outcomes and increased surgical morbidity.

The rail sign was found to predict the need for additional perioperative management, such as preoperative vascular control and uterine artery embolization. It was also associated with a higher rate of blood transfusion, ICU admission, hysterectomy, and bladder invasion.

The study highlights the potential clinical significance of the rail sign in guiding surgical management and predicting outcomes in patients with PAS. It could help tailor surgical approaches based on the depth of villous invasion and the risk of complications, providing a valuable tool for obstetricians in managing these high-risk cases.

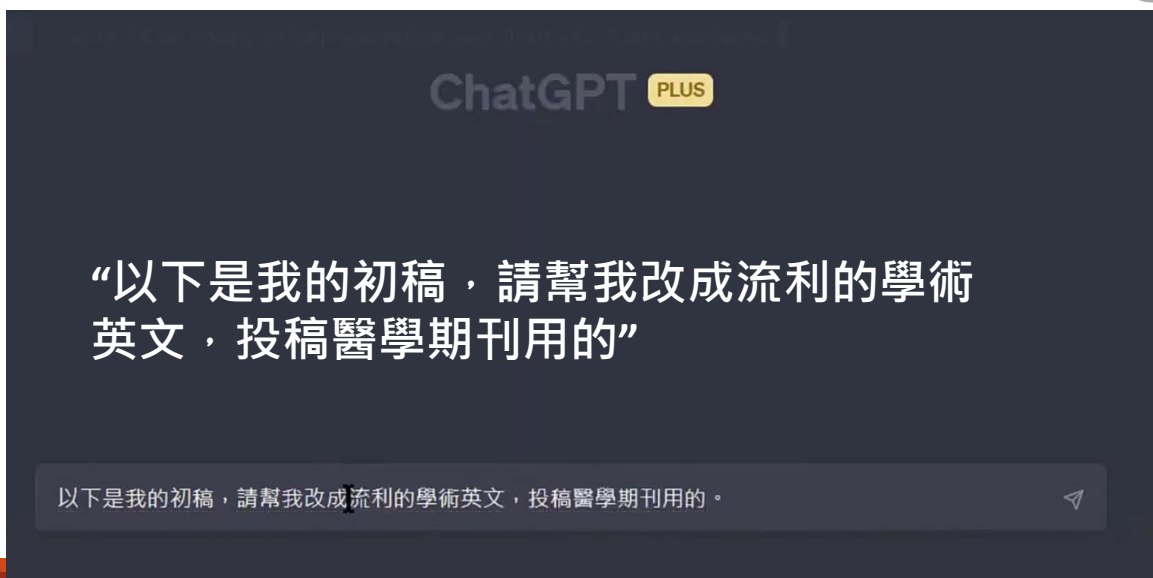
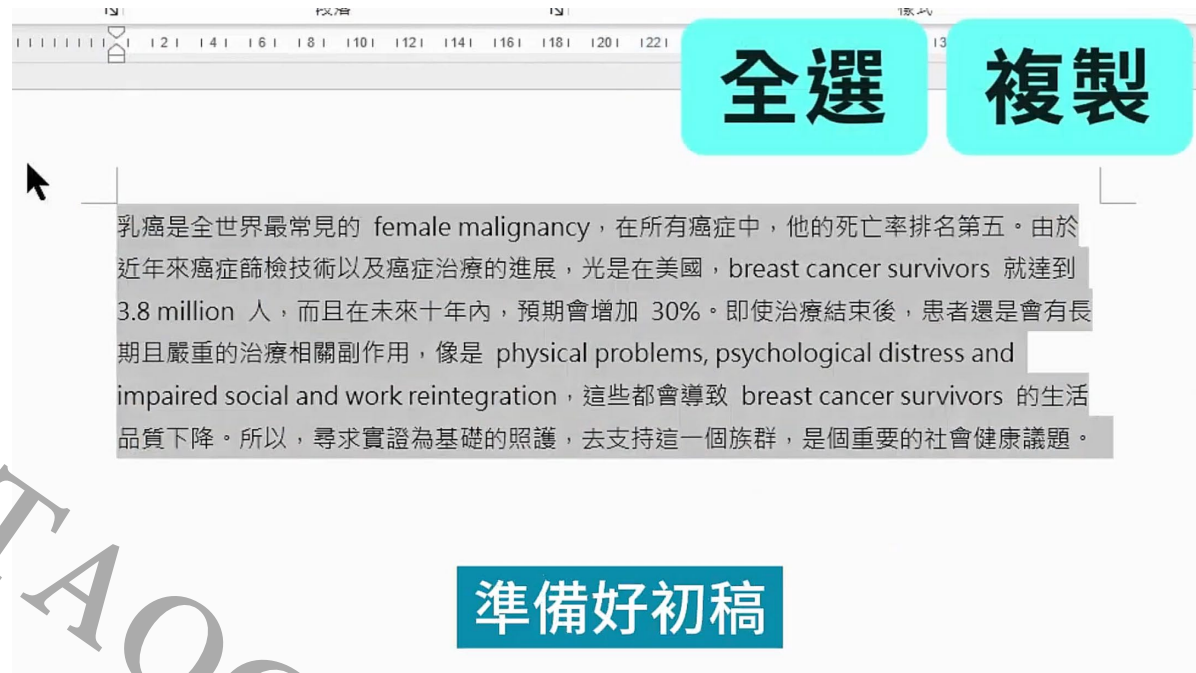
promising marker for
however, further
elucidate its role in



如何使用ChatGPT幫我們寫論文

- <https://www.youtube.com/watch?v=LmPBG2gIDK0>







專用

參考資料 郵件 校閱 檢視 說明 EndNote X9 Writefull

Manuscript SD 內文 無間距

聽寫中!

我今天投稿一篇文章到醫學期刊去，不過期刊社說我的相似性過高達 40%，所以我要求我修改，但我這篇文章其實都是我自己寫的，所以接下來我會給你一段一段的英文，請你幫我換句話說，盡量減少跟其他文獻的相似程度。

Please note that the provided text is a revised version for academic submission. It is always recommended to review and edit the content according to the specific guidelines and requirements of your target journal before submission.

Regenerate response

我已經寫好我的醫學論文摘要，但我不確定要下什麼標題，我給你我的摘要，你提出五個可能的標題讓我選好嗎？

讓我挑選好嗎

Tip 4

小修小補之後
請 ChatGPT 看

請問以下這段文法是否正確，語意是否清晰？如果寫得不好，直接幫我修改成流暢的英文。

Our study utilized network meta-analysis to compare various exercise interventions and concluded that within a 12-week timeframe, (concurrent) aerobic and strength training is the most effective type of exercise for improving quality of life in breast cancer survivors, followed by aerobic activity with a borderline effect. This study is the first in the literature to provide answers to questions regarding the effectiveness of different types of exercise, their comparison, and the ranking of exercise benefits.

請問以下這段文法是否正確

Tip 5

換句話說
降低相似性

我今天投稿一篇文章到醫學期刊去，不過期刊社說我的相似性過高達40%，所以我要求我修改，但我這篇文章其實都是我自己寫的，所以接下來我會給你一段一段的英文，請你幫我換句話說，盡量減少跟其他文獻的相似程度。

“rephrase”



當然，我樂意協助您修改文章，以減少與其他文獻的相似程度。請提供您的文章段落，我將盡力為您重新表達。



Network meta-analysis is a statistical method that allows for the simultaneous comparison of multiple interventions and can help to identify which exercise interventions are most effective



Network meta-analysis is a statistical approach that enables the simultaneous evaluation of various interventions, aiming to determine the most effective exercise interventions.

Tip 6

回覆審閱意見

非常感謝編輯以及審閱者的詳細閱讀與回饋意見。這些審查跟很棒的意見都能夠協助我們把這篇文章變的更好，所有的意見跟看法，我們都做了直接修改並註明修改的地方，或者提出我們的論點並以參考文獻支持，以下我們會針對您所提出的意見逐點回覆再次感謝您的時間與真知灼見

使用自己習慣的語言去做好寒暄

幫我改成英文，投稿醫學期刊跟審閱者溝通用的

非常感謝編輯以及審閱者的詳細閱讀與回饋意見。這些審查跟很棒的意見都能夠協助我們把這篇文章變的更好，所有的意見跟看法，我們都做了直接修改並註明修改的地方，或者提出我們的論點並以參考文獻支持，以下我們會針對您所提出的意見逐點回覆，再次感謝您的時間與真知灼見。

然後再翻成英文會是比较好的

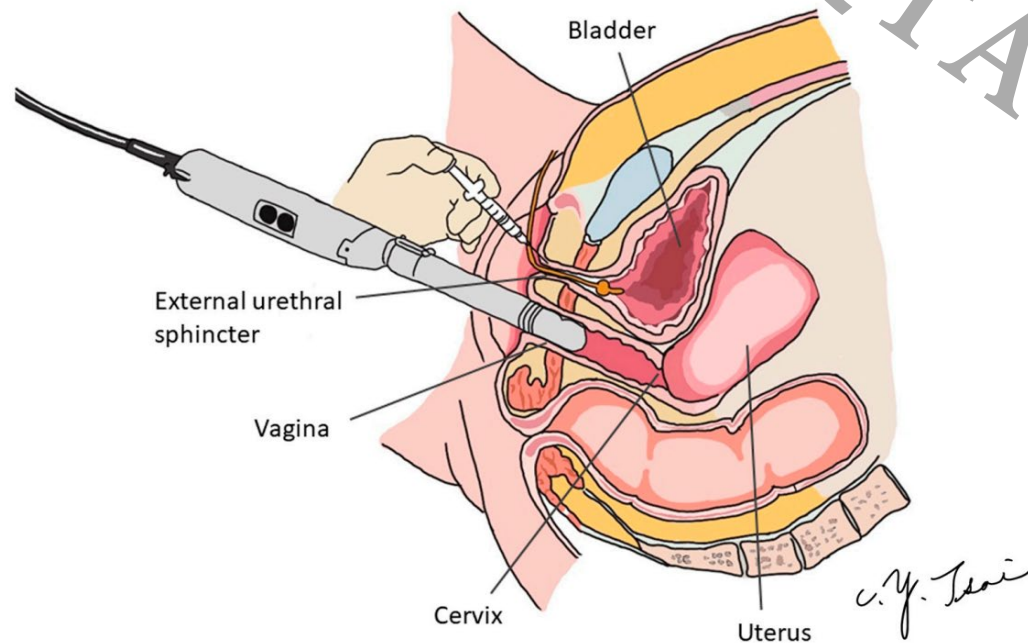
Guidance for Authors, Peer Reviewers, and Editors on Use of AI, Language Models, and Chatbots

- To assist authors and after reminding them of these new policies, **JAMA and the JAMA Network journals** will ask authors to address this question in the manuscript submission systems:
 - ❑ **Did you use AI, a language model, machine learning, or similar technologies** to create or assist with creation or editing of any of the content in this submission (eg, text, tables, figures, video)? (Note: this does not include basic tools for checking grammar, spelling, references, etc.)
- If answer yes to this question, 2 follow-up questions are addressed:
 - ❑ **Please provide a description of the AI-generated content that is included in this submission** and the name of the model or tool used in the space below.
 - ❑ **Please confirm that you take responsibility for the integrity of the content generated by these tools** and that you have provided a description of such generated content and the name of the model or tool used, and manufacturer in the Acknowledgment or Methods section of the manuscript.



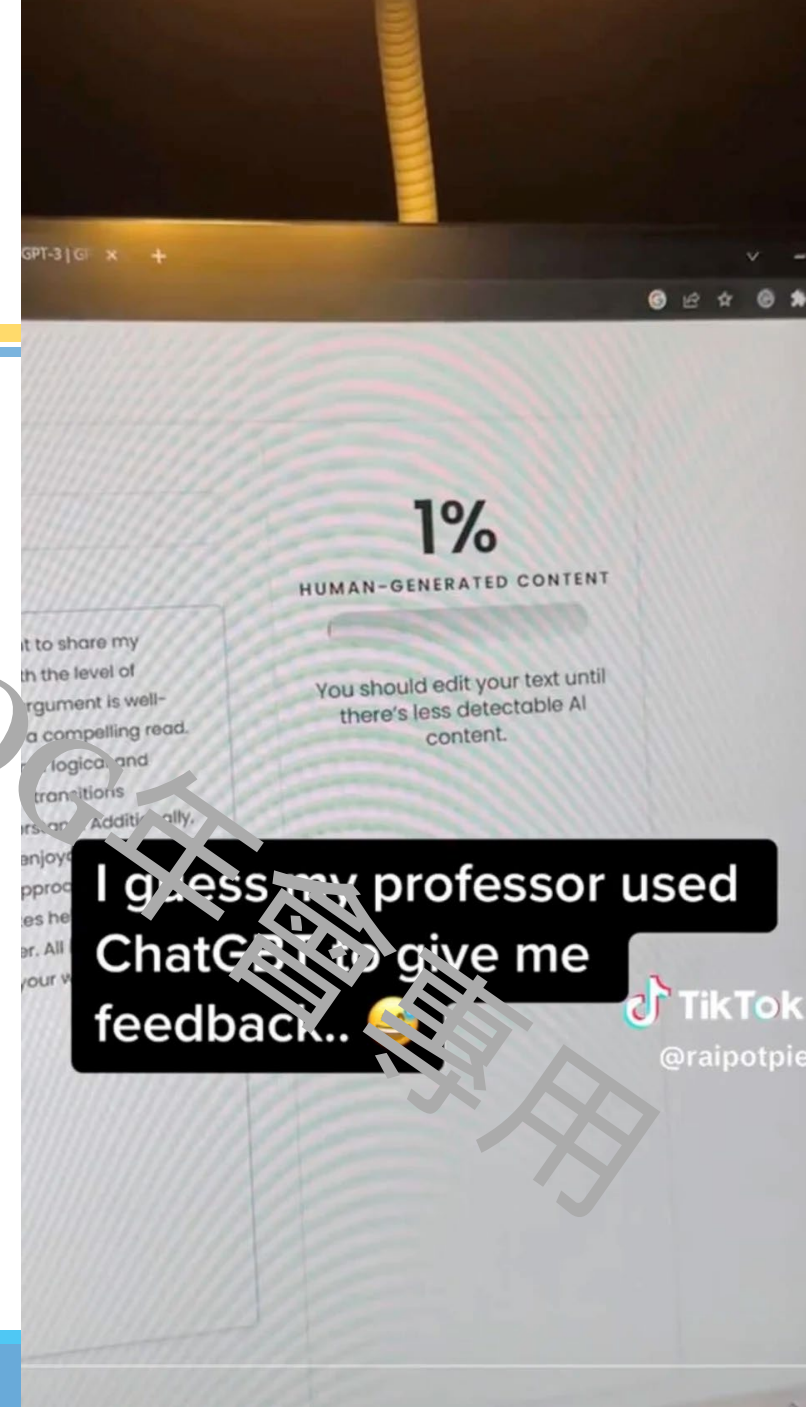
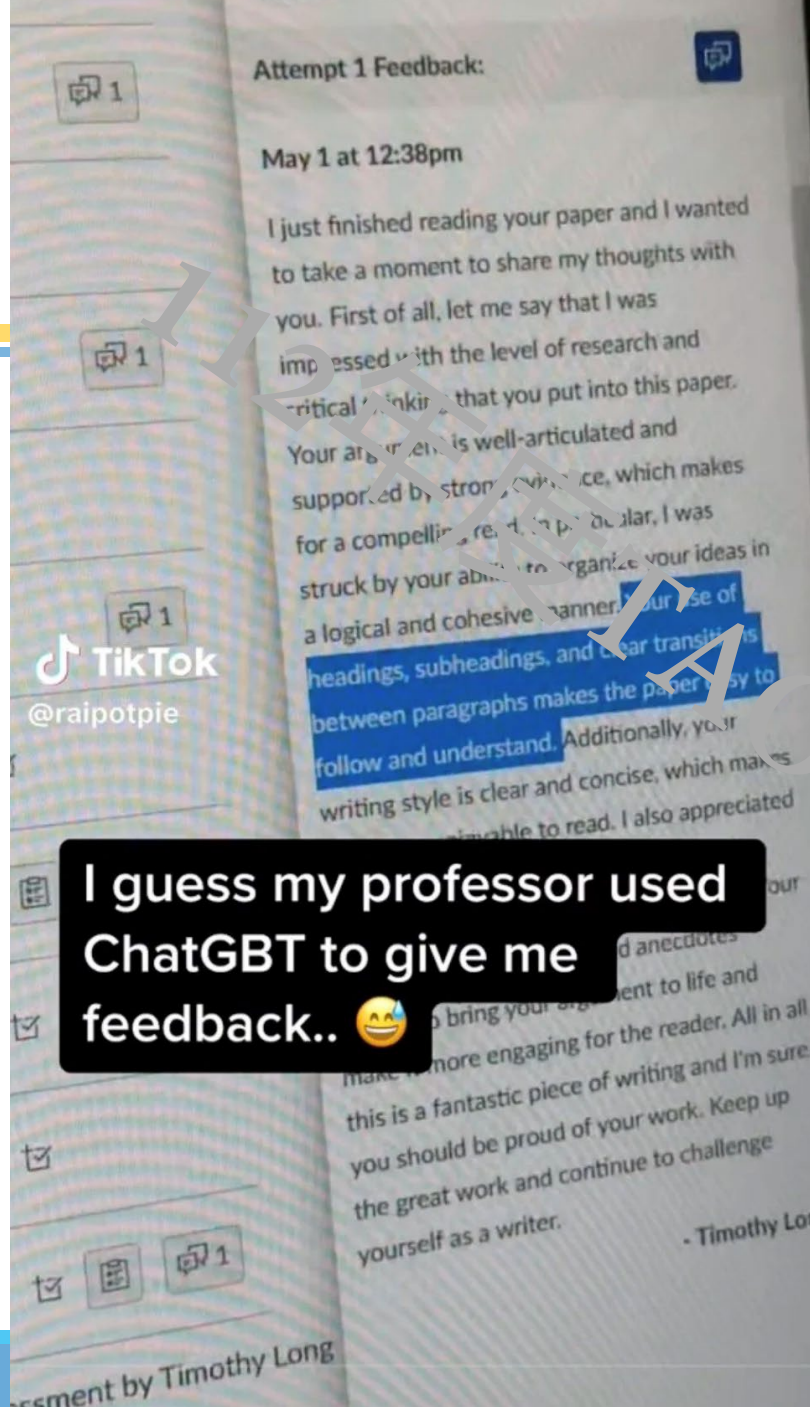
Article

The Efficacy of Transvaginal Ultrasound-Guided BoNT-A External Sphincter Injection in Female Patients with Underactive Bladder



Regenerate Response

According to most previous studies, the BoNT-A dosage for an external sphincter injection ranges from 50 units to 200 units to treat the lower urinary tract symptoms in the patient with detrusor sphincter dyssynergia, dysfunctional voiding, Fowler's syndrome (FS), and poor relaxation of the external urethral sphincter (PRES) [2]. Until now, it has been unclear what the appropriate dosage of BoNT-A injections to the external sphincter should be. In previous treatments, most studies used 100 units. However, Kao et al. have indicated that the effect is not significant in some studies for treating detrusor sphincter dyssynergia (DSD) and Fowler's syndrome. In our study, the objective is to relax the external sphincter, which enables patients to urinate with abdominal pressure. It is hoped that a noticeable effect of relaxing the external sphincter can be achieved. Therefore, before conducting this study, we carried out a pilot study and found that the effect of using 200 units was more significant. Consequently, this dosage was adopted in our study. Regarding a cosmetic BoNT-A injection, Yi et al. conducted a review on the use of BoNT-A injections in the platysma muscle to treat platysmal band and lower facial lifting. The authors concluded that a total of 60 units of BoNT-A should be injected at 20 points on both sides of the platysma band. For jawline definition, they suggested a total of 40 units for 20 points with a subdermal injection [26]. Doan et al. published a systematic review and meta-analysis to evaluate the efficacy and optimal dose of BoNT-A in the post-stroke lower extremity spasticity (PLES). They found that doses of approximately 300 U of BoNT-A could be the preferable dosage for spastic plantar flexors, which is the most common pattern of PLES [27]. Interestingly, in our study, we observed that after injecting large doses of BoNT-A into a relatively small muscle group, the women's external sphincter, the patients showed a significant improvement in lower urinary tract symptoms accompanied by a lower incidence of side effects such as incontinence. Therefore, the interaction of the external sphincter with a BoNT-A injection is worthy of further consideration.



More than an AI detector Preserve what's human.

We bring transparency to humans navigating a world filled with AI-generated content. GPTZero is the gold standard in AI detection, trained to detect ChatGPT, GPT4, BARD, Llama, and other AI models.

[Check out our products](#) →

Was this text written by a **human** or **AI**?

Try detecting one of our sample texts:

[ChatGPT](#) [GPT4](#) [Bard](#) [Human](#) [AI + Human](#)

Paste your text here...

0/5000 characters

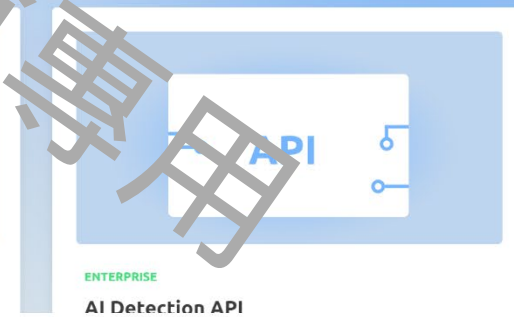
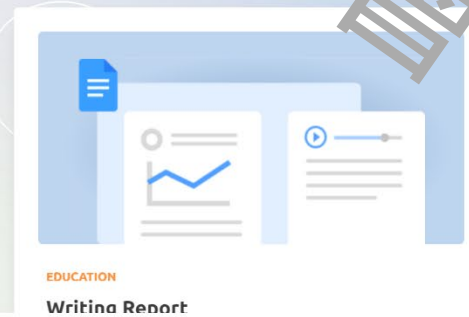
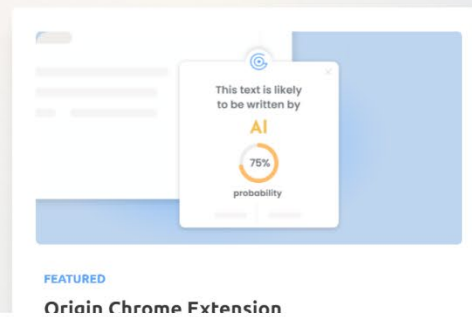
Check Origin

Upload file

.pdf, .doc, .docx, .txt

By continuing you agree to our [Terms of service](#)

Discover our latest products



By using GPTZero you consent to our [cookie policy](#)

Chatbots and Generative Artificial Intelligence in Relation to Scholarly Publication

- In 2023/01 and 2023/05, the World Association of Medical Editors (WAME) published its recommendations on the use of ChatGPT and other chatbots in scholarly publications
 1. **Chatbots cannot be authors.**
 2. **Authors should be transparent when chatbots are used** and provide information about how they were used.
 3. **Authors are responsible for material provided by a chatbot** in their paper (including the accuracy of what is presented and the absence of plagiarism) and for appropriate attribution of all sources
 4. Editors and peer reviewers should specify, to authors and each other, any use of chatbots in the evaluation of the manuscript and generation of reviews and correspondence. **If they use chatbots in their communications with authors and each other, they should explain how they were used.**
 5. Editors need appropriate tools to help them detect content generated or altered by AI.



Let's ask ChatGPT to question itself !

- “Limitation of ChatGPT on medication”

- Lack of Medical Expertise
- Lack of real-time data
- Not a Substitute for Healthcare Professionals
- Potential for Misinformation
- Limited Understanding of Regional Regulations
- Language Barriers
- Responsibility for Actions

Warnings and concerns on ChatGPT

- **ChatGPT's output can be incorrect or biased** (according to OpenAI's own admission)
 - ✓ ex: citing article references that do not exist
- **ChatGPT is only as good as its derived training data** (potentially biased & unreliable)
- **ChatGPT is not readily updated after 2021** (according to OpenAI)
 - ✓ Model training: cost- and time-intensive → there will always be some lag in the information
- **ChatGPT risks misleading without proper warning**
- **Recycled and amplified errors**
 - ✓ ChatGPT's outputs could be used to train future iterations of the model
- **Careless, unchecked use could be a foe to both society and scholarly publishing**



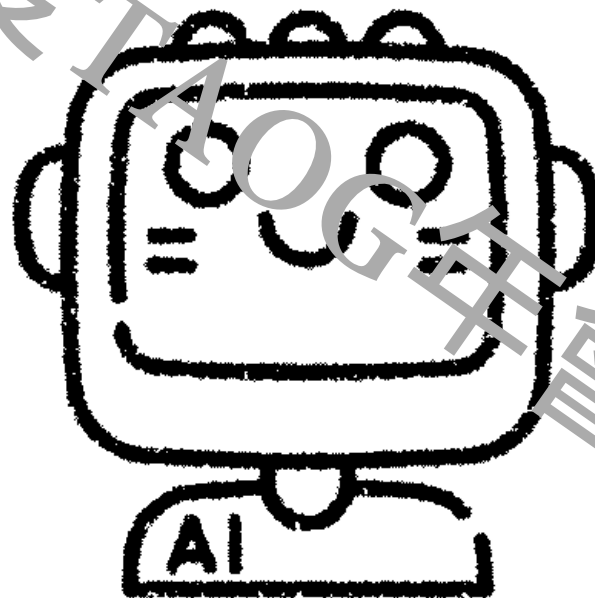
Promising future

- **Instead than replacing real physicians & nurses**, ChatGPT is designed to support them and improve the quality of their care.
 - ✓ Offer consistent, approachable, individualized, and interesting information and assistance
 - ✓ Reduce the workload & stress of the medical staff by handling routine or repetitive tasks
- **Several drawbacks**
 - ✓ **Doesn't always provide precise messages** for every circumstance or patient
 - ✓ Concerns around **data privacy, permission, responsibility, or accountability**

Take home message

- ChatGPT is an advanced language model developed by OpenAI
- **ChatGPT has the potential to be valuable to users who want preliminary information** about virtually any topic in OBGYN.
- ChatGPT is **only as good as its derived training data**, is **not readily updated** after 2021, and **may risk misleading without proper warning**
- Instead than replacing real physicians & nurses, ChatGPT is designed to support them and improve the quality of their care

Thanks for listening



112年度TAOG年會專用



ChatGPT in obstetrics and gynecology

Jin-Chung Shih, MD PhD
Department of Obstetrics and Gynecology,
National Taiwan University Hospital

