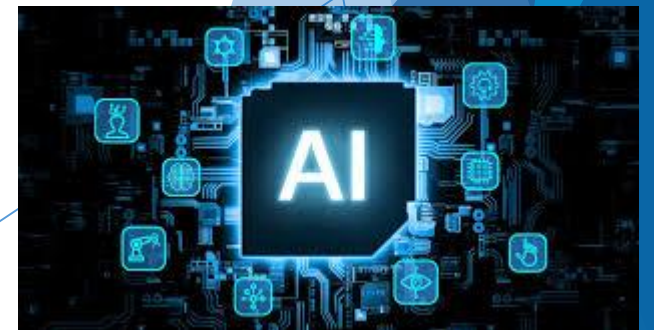


Inteligencia Artificial para búsqueda de información científica

Fernanda Cuneo

¿Qué es?

- ▶ La inteligencia artificial (IA) es un campo de la informática que desarrolla sistemas capaces de realizar tareas que, tradicionalmente, requieren inteligencia humana. Estas tareas incluyen aprender, razonar, resolver problemas, interpretar lenguaje natural y tomar decisiones.



Definición técnica

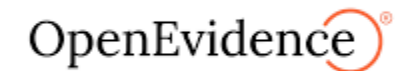
- ▶ La Organización Panamericana de la Salud (OPS) define la inteligencia artificial (IA) como **"la ciencia que desarrolla máquinas para hacer tareas que requerirían inteligencia humana"**. Esta definición abarca métodos que permiten ejecutar tareas que normalmente requieren inteligencia humana, incluyendo tanto la representación del conocimiento humano (IA simbólica) como el uso de datos para generar conocimiento (IA basada en aprendizaje automático). Además, engloba múltiples áreas de aplicación, como el procesamiento del lenguaje natural, la visión artificial, la robótica y el procesamiento de voz, entre otras



¿Cómo Funciona?

- ▶ La IA no “piensa” como los humanos, pero utiliza datos y algoritmos para simular procesos de razonamiento.
- ▶ Sus pilares fundamentales incluyen:
 - **Datos:** La IA necesita grandes cantidades de datos para aprender. Por ejemplo: Un sistema de reconocimiento facial analiza millones de fotos para distinguir características únicas de un rostro.
 - **Algoritmos:** Un algoritmo es un conjunto de instrucciones que le dice al sistema cómo analizar los datos. Ejemplo: En Netflix, los algoritmos analizan tus preferencias para recomendarte películas o series.
 - **Aprendizaje Automático (Machine Learning):** Es una rama de la IA que permite que las máquinas aprendan por sí mismas sin ser programadas explícitamente. Ejemplo: Un modelo de machine learning puede predecir el clima al analizar patrones históricos y datos actuales.
 - **Aprendizaje Profundo (Deep Learning):** Es un tipo avanzado de aprendizaje automático que utiliza redes neuronales artificiales, inspiradas en cómo funciona el cerebro humano. Ejemplo: Los autos autónomos de Tesla utilizan redes neuronales para tomar decisiones de conducción en tiempo real.

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- What is the optimal dosage of labetalol for treating hypertension in pregnant women?
- How does methyldopa compare to labetalol in terms of efficacy and side effects in pregnancy-induced hypertension?
- What are the long-term effects of using labetalol and methyldopa on the cardiovascular health of children born to mothers with pregnancy-induced hypertension?

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Pregnancy-induced hypertension (PIH) is a significant health concern, affecting approximately 6-10% of pregnancies globally and leading to severe maternal and fetal complications. Labetalol and methyldopa are two commonly used antihypertensive medications for managing PIH. Research indicates that labetalol is generally more effective than methyldopa in controlling blood pressure, with a quicker onset of action and fewer side effects.

Efficacy of Labetalol vs. Methyldopa

- **Blood Pressure Control:** Labetalol demonstrated a significant reduction in mean arterial pressure (MAP) compared to methyldopa, with studies showing a mean MAP of 100.03 mmHg for labetalol versus 105.8 mmHg for methyldopa after 48 hours (Ghosh et al., 2021).
- **Time to Control:** The average time required to achieve blood pressure control was shorter with labetalol (36.97 hours) compared to methyldopa (42.22 hours) (Khatun et al., 2024) (Akteror et al., 2023).
- **Dosage:** Patients on labetalol required a lower average daily dose (380 mg) compared to those on methyldopa (1540 mg) (Ghosh et al., 2021).

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☐ 1. A comparative study of labetalol and methyldopa in treatment of pregnancy induced hypertension

Abeda Khatun, Rehana Parven, S. Naznin +1 more

20 Jun 2024, International Journal of Clinical Obstetrics and

The study compares labetalol and methyldopa in treating pregnancy-induced hypertension, finding labetalol significantly more effective in reducing blood pressure and promoting spontaneous labor, with a mean time to control BP of 36.97 hours for

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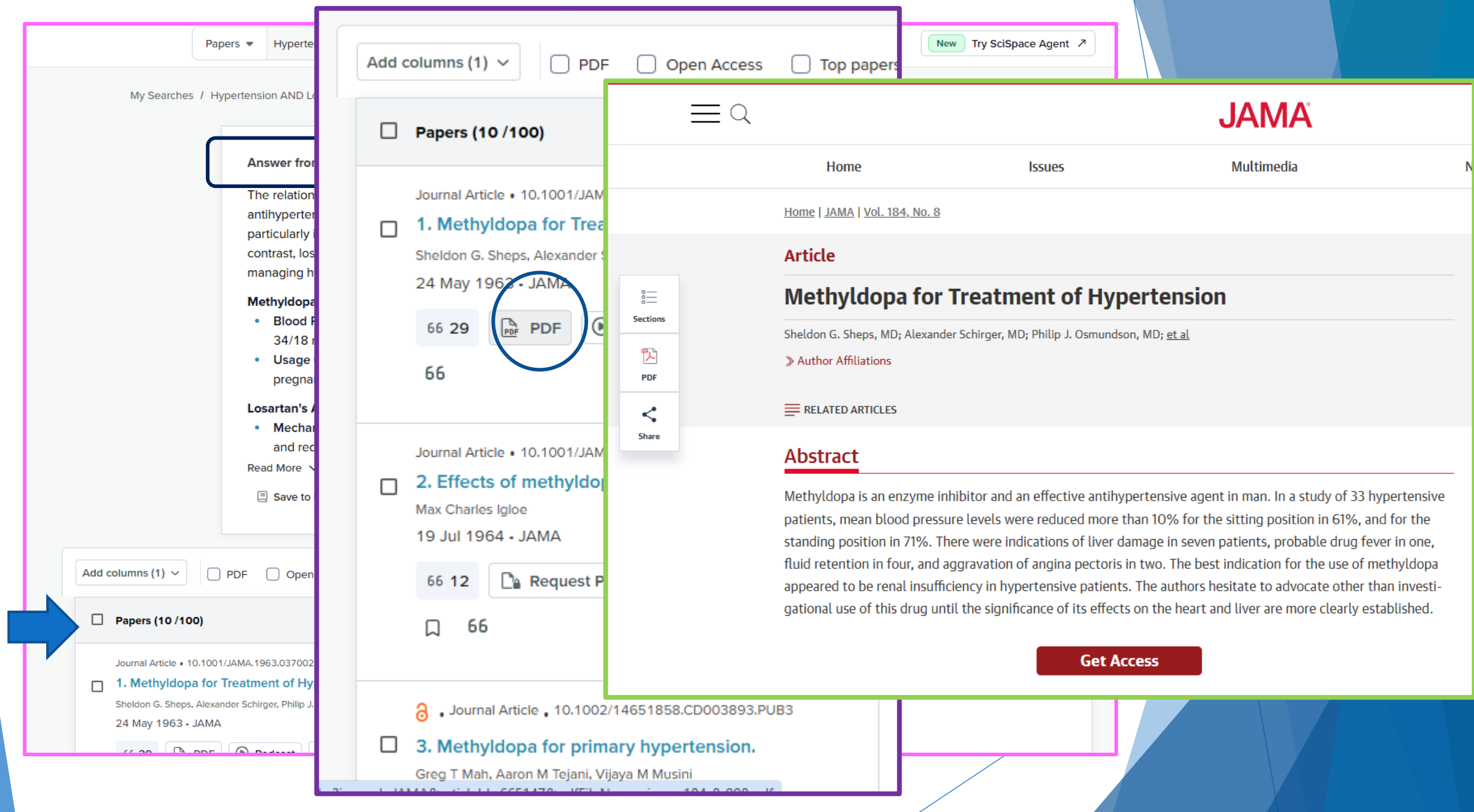
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Try searching for:

- What are the comparative effects of Losartan and Methyldopa on blood pressure management in patients with hypertension?
- How does the combination of Losartan and Methyldopa impact cardiovascular outcomes in hypertensive patients?
- What are the potential side effects and interactions of co-administering Losartan and Methyldopa in the treatment of hypertension?

Tip: If you're asking a question, add a question mark (?) at the end to get better results



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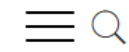
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☐ 3. Methyldopa for primary hypertension.

Greg T Mah, Aaron M Tejani, Vijaya M Musini



Article

Methyldopa for Treatment of Hypertension

Sheldon G. Sheps, MD; Alexander Schirger, MD; Philip J. Osmundson, MD; [et al](#)

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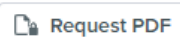
Abstract

Methyldopa is an enzyme inhibitor and an effective antihypertensive agent in man. In a study of 33 hypertensive patients, mean blood pressure levels were reduced more than 10% for the sitting position in 61%, and for the standing position in 71%. There were indications of liver damage in seven patients, probable drug fever in one, fluid retention in four, and aggravation of angina pectoris in two. The best indication for the use of methyldopa appeared to be renal insufficiency in hypertensive patients. The authors hesitate to advocate other than investi-

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Methyldopa for primary hypertension.

Greg T Mah, - 06 Oct 2009 - Cochrane Database of Systematic Reviews - Vol. +2 more

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TL;DR: A meta-analysis shows that methyldopa at doses ranging from 500-2250 mg daily lowers systolic and diastolic blood pressure by a mean of 13 (95%CI 6-20) / 8 (95%CI 4-13) mmHg for patients with primary hypertension.

Abstract: BACKGROUND Hypertension is associated with an increased risk of stroke, myocardial infarction and congestive heart failure. Methyldopa is a centrally acting antihypertensive agent, which was commonly used in the 1970's and 80's for blood pressure control. Its use at present has largely been replaced by antihypertensive drug classes with less side effects, but it is still used in developing countries due to its low cost. A review of its relative effectiveness compared to placebo on surrogate and clinical outcomes was justified. OBJECTIVES To quantify the effect of methyldopa compared to placebo on surrogate and clinical outcomes.

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Conclusions Regarding Methyldopa for Primary Hypertension

Blood Pressure Lowering Effect

Methyldopa has been found to lower blood pressure in patients with primary hypertension to varying degrees compared to placebo [1]. A meta-analysis of six trials (N=231) indicated that daily doses of methyldopa ranging from 500-2250 mg reduced systolic blood pressure by an average of 13 mmHg (95% CI 6-20) and diastolic blood pressure by an average of 8 mmHg (95% CI 4-13) [2].

Uncertainty Regarding Clinical Outcomes

The effect of methyldopa on significant clinical outcomes such as mortality and morbidity remains uncertain [1]. None of the twelve trials included in the review evaluated these specific effects compared to placebo [3]. Furthermore, data on withdrawals due to adverse effects were not reported in a manner that allowed for a meaningful meta-analysis [4].

In summary, while methyldopa demonstrates a clear blood

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Resultados clave del estudio sobre el tratamiento de la hipertensión postparto

El estudio tuvo como objetivo determinar la efectividad del losartán en el tratamiento de la hipertensión postparto en pacientes con preeclampsia severa, comparándola con un régimen antihipertensivo estándar. Los resultados clave se resumen a continuación:

Cambios en la presión arterial (sistólica y diastólica)

- **Reducción significativa en ambos grupos: **** Tanto el Grupo A (tratamiento estándar) como el Grupo B (tratamiento estándar más losartán) mostraron una reducción estadísticamente significativa tanto en la presión arterial sistólica (PAS) como en la presión arterial diastólica (PAD) desde el inicio hasta el día 90 de la medición [1] [2].
- Grupo A (Tratamiento Estándar) :** El PAS disminuyó de una línea de base de 135.46 ± 13.88 mmHg a una final 109.76 ± 10.54 mmHg ($p < 0.001$). La PAD disminuyó de una línea de base de 85.71 ± 10.17 mmHg a una final 72.14 ± 10.55 mmHg ($p < 0.001$) [1].
- Grupo B (Tratamiento Estándar + Losartán) :** El PAS disminuyó de un nivel basal de 135.84 ± 14.39 mmHg a un final 110.68 ± 9.79 mmHg ($p < 0.001$). La PAD disminuyó de una línea de base de 83.08 ± 9.58 mmHg a una final 72.61 ± 9.16 mmHg ($p < 0.001$) [2].
- **Eficacia similar entre grupos: **** La comparación de los valores iniciales y finales de PAS y PAD entre los dos grupos de tratamiento no mostró diferencias significativas, lo que indica que ambos

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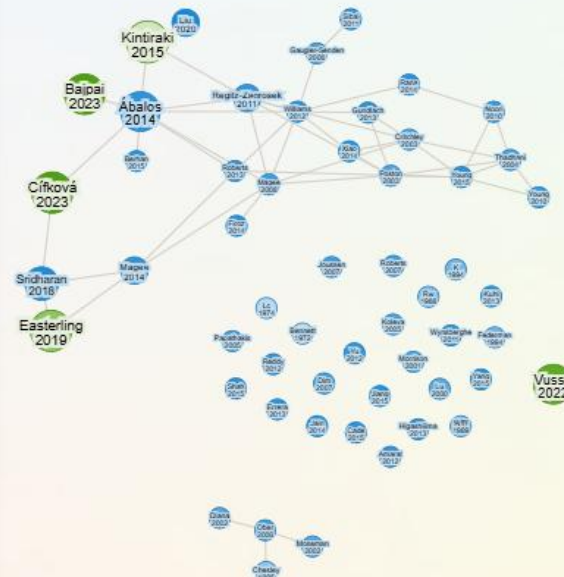
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Oral antihypertensive regimens (nifedipine retard, labetalol, and methyldopa) for management of severe hypertension in pregnancy: an open-label, randomised controlled trial.

The Lancet

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PDF

Summary Background Hypertension is the most common medical disorder in pregnancy, complicating one in ten pregnancies. Treatment of severely increased blood pressure is widely recommended to reduce the risk for maternal complications. Regimens for the acute treatment of severe hypertension typically include intravenous medications. Although effective, these drugs require venous access and careful fetal monitoring and might not be feasible in busy or low-resource environments. We therefore aimed to compare the efficacy and safety of three oral drugs, labetalol, nifedipine retard, and methyldopa for the management of severe hypertension in pregnancy. Methods In this multicentre, parallel-group, open-label, randomised controlled trial, we compared these oral antihypertensives in two public hospitals in Nagpur, India. Pregnant women were eligible for the trial if they were aged at least 18 years; they were pregnant with fetuses that had reached a gestational age of at least 28 weeks; they required pharmacological blood pressure control for severe hypertension (systolic blood pressure ≥ 160 mm Hg or diastolic blood pressure ≥ 110 mm Hg); and were able to swallow oral medications. Women were randomly assigned to receive 10 mg oral nifedipine, 200 mg oral labetalol (hourly, in both of which the dose could be escalated if hypertension was maintained), or 1000 mg methyldopa (a single dose, without dose escalation). Masking of participants, study investigators, and care providers to group allocation was not possible because

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Oral antihypertensive regimens (nifedipine retard, labetalol, and methyldopa) for management of severe hypertension in pregnancy: an open-label, randomised controlled trial

Thomas Easterling, Shuchita Mundle, Hillary Bracken, Seema Parvekar, Sulabha Mool, Laura A Magee, Peter von Dadelzen, Tara Shochet, Beverly Winikoff

Summary

Background Hypertension is the most common medical disorder in pregnancy, complicating one in ten pregnancies. Treatment of severely increased blood pressure is widely recommended to reduce the risk for maternal complications. Regimens for the acute treatment of severe hypertension typically include intravenous medications. Although effective, these drugs require venous access and careful fetal monitoring and might not be feasible in busy or low-resource environments. We therefore aimed to compare the efficacy and safety of three oral drugs, labetalol, nifedipine retard, and methyldopa for the management of severe hypertension in pregnancy.

Methods

In this multicentre, parallel-group, open-label, randomised controlled trial, we compared these oral antihypertensives in two public hospitals in Nagpur, India. Pregnant women were eligible for the trial if they were aged at least 18 years; they were pregnant with fetuses that had reached a gestational age of at least 28 weeks; they required pharmacological blood pressure control for severe hypertension (systolic blood pressure ≥ 160 mm Hg or diastolic blood pressure ≥ 110 mm Hg); and were able to swallow oral medications. Women were randomly assigned to receive 10 mg oral nifedipine, 200 mg oral labetalol (hourly, in both of which the dose could be escalated if hypertension was maintained), or 1000 mg methyldopa (a single dose, without dose escalation). Masking of participants, study investigators, and care providers to group allocation was not possible because of different escalation protocols in the study groups. The primary outcome was blood pressure control (defined as 120–150 mm Hg systolic blood pressure and 70–100 mm Hg diastolic blood pressure) within 6 h with no adverse outcomes. This study is registered with ClinicalTrials.gov, number NCT01912677, and the Clinical Trial Registry, India, number ctri/2013/08/003866.

Findings

Between April 1, 2015, and Aug 21, 2017, we screened 2307 women for their inclusion in the study. We excluded 1413 (61%) women who were ineligible, declined to participate, had impending eclampsia, were in active labour, or had a combination of these factors. 11 (4%) women in the nifedipine group, ten (3%) women in the labetalol group, and 11 (4%) women in the methyldopa group were ineligible for treatment (because they had only one qualifying blood pressure measurement) or had treatment stopped (because of delivery or transfer elsewhere). 894 (39%) women were randomly assigned to a treatment group and were included in the intention-to-treat analysis: 298 (33%) women were assigned to receive nifedipine, 295 (33%) women were assigned to receive labetalol, and 301 (33%) women were assigned to receive methyldopa. The primary outcome was significantly more common in women in the nifedipine group than in those in the methyldopa group (249 [84%] women vs 230 [76%] women; $p=0.03$). However, the primary outcome did not differ between the nifedipine and labetalol groups (249 [84%] women vs 228 [77%] women; $p=0.05$) or the labetalol and methyldopa groups ($p=0.80$). Seven serious adverse events (1% of births) were reported during the study: one (<1%) woman in the labetalol group had an intrapartum seizure and six (1%) neonates (one [<1%] neonate in the nifedipine group, two [1%] neonates in the labetalol group, and three [1%] neonates in the methyldopa group) were stillborn. No birth had more than one adverse event.

Interpretation

All oral antihypertensives reduced blood pressure to the reference range in most women. As single

Lancet 2019; 394: 1011–21

Published Online

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[http://dx.doi.org/10.1016/S0140-6736\(19\)31282-6](http://dx.doi.org/10.1016/S0140-6736(19)31282-6)

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Department of Obstetrics and Gynecology, University of Washington, Seattle, WA, USA (Prof T Easterling MD); Department of Obstetrics and Gynecology, Government Medical College, Nagpur, India (Prof S Mundle MD); Gynuity Health Projects, New York, NY, USA (H Bracken PhD, T Shochet PhD, Prof B Winikoff MD); Department of Obstetrics and Gynecology, Daga Memorial Women's Government Hospital, Nagpur, India (S Parvekar MD, S Mool DGO); and Department of Women and Children's Health, King's College London, London, UK (Prof L A Magee MD, Prof P von Dadelzen DPhil)

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hbracken@gynuity.org

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Oral antihypertensive regimens (nifedipine retard, labetalol, and methyldopa) for management of severe hypertension in pregnancy: an open-label, randomised controlled trial.

The Lancet 2019
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Summary Background Hypertension is the most common medical disorder in pregnancy, complicating one in ten pregnancies. Treatment of severely increased blood pressure is widely recommended to reduce the risk for maternal complications. Regimens for the acute treatment of severe hypertension typically include intravenous medications. Although effective, these drugs require venous access and careful fetal monitoring and might not be feasible in busy or low-resource environments. We therefore aimed to compare the efficacy and safety of three oral drugs, labetalol, nifedipine retard, and methyldopa for the management of severe hypertension in pregnancy. Methods In this multicentre, parallel-group, open-label, randomised controlled trial, we compared these oral antihypertensives in two public hospitals in Nagpur, India. Pregnant women were eligible for the trial if they were aged at least 18 years; they were pregnant with fetuses that had reached a gestational age of at least 28 weeks; they required pharmacological blood pressure control for severe hypertension (systolic blood pressure ≥ 160 mm Hg or diastolic blood pressure ≥ 110 mm Hg); and were able to swallow oral medications. Women were randomly assigned to receive 10 mg oral nifedipine, 200 mg oral labetalol (hourly, in both of which the dose could be escalated if hypertension was maintained), or 1000 mg methyldopa (a single dose, without dose escalation). Masking of participants, study investigators, and care providers to group allocation was not possible because

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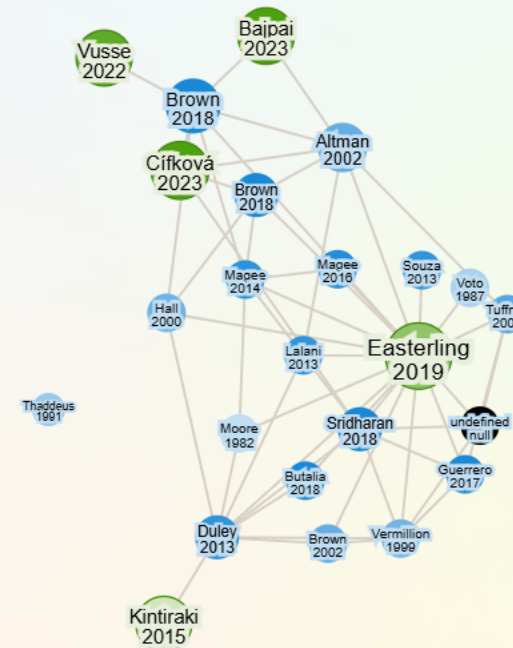
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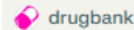
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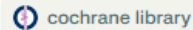
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Methyldopa for primary hypertension - PMC - ...

Methyldopa and labetalol are both medications used to treat hypertension, including high blood pressure during pregnancy.

Methyldopa is a centrally acting antihypertensive that lowers blood pressure by reducing sympathetic nervous system activity. It acts as an agonist at central inhibitory alpha-adrenergic receptors, resulting in decreased peripheral sympathetic tone and reduced arterial pressure. It lowers both standing and supine blood pressure, with effects beginning within 12 to 24 hours after oral administration. Methyldopa has been used since the 1960s and is still used in some settings for its low cost, although its use has largely been replaced by drugs with fewer side effects. It reduces systolic and diastolic blood pressure by about 13/8 mmHg compared to placebo. Common side effects include drowsiness, headache, and dry mouth. [ncbi.nlm.nih](#) +3

Labetalol is a beta blocker that also blocks alpha-adrenergic receptors, leading to decreased peripheral resistance and reduction of blood pressure. It slows heart rate and reduces the workload of the heart. Labetalol is commonly used to treat hypertension, including in pregnancy, and can be given orally or intravenously. It is considered effective and well-tolerated, often preferred in severe hypertension or when rapid blood pressure control is needed. Side effects may include dizziness, headache, and nausea. [nhs](#) [youtube](#)

Comparative studies in pregnant women with hypertension show that oral labetalol is generally more effective than oral methyldopa in lowering systolic, diastolic, and mean arterial pressures. Labetalol-treated patients often achieve better blood pressure control and have more spontaneous

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hypertension AND methyldopa AND labetalol

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ncbi.nlm.nih.gov/books/NBK551671

Methyldopa - StatPearls - NCBI Bookshelf

DrugBank
go.drugbank.com/drugs/DB00968

Methyldopa: Uses, Interactions, Mechanism of Action
Methyldopa is a centrally-acting alpha-2 adrenergic agonist used in combination with hydrochlorothiazide, and to treat hypertension.

Cochrane Library
cochrane.org/evidence/CD003...

Methyldopa reduces blood pressure in people with hypertension
Methyldopa is a medication that has been used to treat hypertension. While there is some belief methyldopa reduces blood pressure, there are conflicting evidence. The aim of this review was to determine the extent to which methyldopa reduces blood pressure, and to determine the clinical effect profile, and to determine the clinical effect profile, and to determine the clinical effect profile.

The Cochrane Database of Systematic Reviews
pmc.ncbi.nlm.nih.gov/articles/PMC71...

Methyldopa for primary hypertension - PMC - PubMed Central
Hypertension is associated with an increased risk of stroke, myocardial infarction and congestive heart failure. Methyldopa is a centrally acting antihypertensive agent, which was commonly used in the 1970's and 80's for blood pressure control. Its use at present has largely been replaced by antihypertensive drug classes with less side effects, but it is still used in developing countries due to its low cost. A review of its relative effectiveness compared to placebo on surrogate and clinical outcomes is justified.

Methyldopa reduces blood pressure in people with high blood pressure

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Methyldopa is a medication that has been used to treat hypertension. While there is some belief methyldopa reduces blood pressure, there are conflicting evidence. The aim of this review was to determine the extent to which methyldopa reduces blood pressure, and to determine the clinical effect profile, and to determine the clinical effect profile, and to determine the clinical effect profile.

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Methyldopa for primary hypertension

Greg T Mah, Aaron M Tejani, Vijaya M Musini Authors' declarations of interest
Version published: 07 October 2009 Version history
<https://doi.org/10.1002/14651858.CD003893.pub3>

Collapse all Expand all

Abstract

Available in English Español 日本語

Background

Hypertension is associated with an increased risk of stroke, myocardial infarction and congestive heart failure. Methyldopa is a centrally acting antihypertensive agent, which was commonly used in the 1970's and 80's for blood pressure control. Its use at present has largely been replaced by antihypertensive drug classes with less side effects, but it is still used in developing countries due to its low cost. A review of its relative effectiveness compared to placebo on surrogate and clinical outcomes is justified.

Objectives

To quantify the effect of methyldopa compared to placebo in randomized controlled trials (RCTs) on all cause mortality, cardiovascular mortality, serious adverse events, myocardial infarctions, strokes, withdrawals due to adverse effects and blood pressure in patients with primary hypertension.

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Authors' conclusions
Background
Objectives
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Results

hypertension AND methyldopa AND labetalol

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Methyldopa Tablets 250mg

METHYLDOPA TABLETS BP

Gestational Hypertension

New Mothers Hate Labor

Nifedipine

Methyldopa

Aldomet 250

methyldopa

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Responder



Imágenes



Fuentes · 1

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The study "Pregnancy Outcome After First Trimester Use of Methyldopa" presents the largest prospective cohort analysis to date on the safety of methyldopa use during the first trimester in pregnant women with chronic hypertension. The study evaluated 261 pregnancies exposed to methyldopa compared with 526 pregnancies without chronic hypertension.

Key findings include:

- **Major birth defects:** The rate of major birth defects in the methyldopa group (3.7%) was slightly higher but not statistically significantly different from that in the comparison group (2.5%). The rates correspond to the general German population prevalence of about 3%. There was no clear pattern of specific birth defects attributable to methyldopa, and no strong evidence of teratogenicity was found.
- **Spontaneous abortion:** There was a tendency toward a higher rate of spontaneous abortions in the methyldopa-exposed group (17% versus 13%), but this was not statistically significant after adjustment and may be related to underlying hypertension or comorbidities rather than

- ▶ Elicit simplifica el proceso de análisis de bibliografía médica al extraer datos clave de múltiples estudios. Compara resultados, identifica tendencias, sintetiza información relevante y evalúa la calidad de los estudios y permite tomar decisiones basadas en evidencia.
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How do labetalol and methyldopa differ in their maternal and fetal outcomes when used to treat hypertension in pregnant women?

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Population clarification



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AUGUST 7, 2025

Among pregnant women with gestational hypertension, what are the safety and efficacy profiles of labetalol and methyldopa in controlling blood pressure?

In treating gestational hypertension, labetalol demonstrates faster blood pressure control compared to methyldopa, with both drugs being effective but labetalol showing generally favorable safety outcomes for mothers and infants.

ABSTRACT

Labetalol tends to reduce blood pressure more quickly than methyldopa in pregnant women with gestational hypertension. * In four studies, labetalol led to a greater or faster decline in blood pressure—one trial reported control at 35.65 hours versus 43.46 hours with methyldopa, and another documented significantly faster reductions at 2, 4, and 6 hours ($p < 0.01$ to $p < 0.001$). * Two studies noted comparable blood pressure lowering with both drugs, while two others reported meaningful reductions in each group without a clear between-group difference. * One trial additionally observed that labetalol required fewer secondary interventions. *

Maternal safety profiles varied. * Several studies reported fewer adverse side effects with labetalol—one systematic review noted that drowsiness was more common with methyldopa—whereas one recent trial identified increased maternal hypotension with labetalol. * Neonatal outcomes also leaned in favor of labetalol in four studies, with reports of lower incidences of respiratory distress, preterm delivery, or small-for-gestational-age births; however, one study recorded higher rates of small-for-gestational-age infants, neonatal hyperbilirubinemia, hypotension, and intensive care admissions with labetalol. * Overall, the studies indicate that both drugs achieve significant blood pressure reduction, with labetalol showing advantages regarding speed of control and, in most studies, a favorable safety profile. *

METHODS >

Among pregnant women with gestational hypertension, what are the safety and efficacy profiles of labetalol and methyldopa in controlling blood pressure?

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Abstract

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Paper search

Using your research question "Among pregnant women with gestational hypertension, what are the safety and efficacy profiles of labetalol and methyldopa in controlling blood pressure?", we searched across over 126 million academic papers from the Semantic Scholar corpus. We retrieved the 50 papers most relevant to the query.

Screening

We screened in sources that met these criteria:

- **Population:** Does the study focus exclusively on pregnant women diagnosed with gestational hypertension (not chronic hypertension or mixed hypertensive disorders)?
- **Intervention:** Does the study evaluate labetalol and/or methyldopa as standalone treatments (not in combination with other antihypertensive medications)?
- **Study Design:** Is the study design either a randomized controlled trial, systematic review, or observational cohort study?
- **Outcomes - Comprehensiveness:** Does the study report both blood pressure control AND maternal/fetal safety outcomes?
- **Outcome Measurement Quality:** Does the study include clear documentation of blood pressure measurements with specified methodology?

We considered all screening questions together and made a holistic judgement about whether to screen in each paper.

 Research report

 Systematic review **PRO**

 Quick search

hypertension pregnancy induced AND labetalol AND methyldopa

● More precise questions work better. Try adding elements like these:

Research design

Outcome specification

Population details





Research report



Systematic review

PRO



Quick search

What is the comparative effectiveness of labetalol versus methyldopa in managing blood pressure for women with pregnancy-induced hypertension?

● Great question!



APRIL 18, 2025

What is the comparative effectiveness of labetalol versus methyldopa in managing blood pressure for women with pregnancy-induced hypertension?

In treating pregnancy-induced hypertension, labetalol achieved greater blood pressure reductions (70/36 mmHg vs 50/30 mmHg) and faster control (35-37 vs 42 hours) than methyldopa in most studies.

ABSTRACT

Ten studies (nine randomized controlled trials and one meta-analysis involving 2,200 women) compared labetalol and methyldopa for managing pregnancy-induced hypertension. * In seven of these studies, labetalol yielded greater blood pressure reductions and improved maternal outcomes. * For example, one trial reported that labetalol reduced systolic blood pressure by 70 mmHg and diastolic pressure by 36



Report

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- ▶ Consensus evalúa el nivel de respaldo de un tema en la bibliografía científica. Su sistema de IA examina múltiples estudios y genera un análisis del grado de consenso en la comunidad científica sobre un hallazgo o tratamiento específico.
- ▶ Esta herramienta posibilita visualizar rápidamente los niveles de acuerdo entre diferentes estudios y filtrar resultados en función de su relevancia clínica. Además, incorpora una función de predicción basada en tendencias científicas, que ayuda a anticipar desarrollos futuros.

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Research starts here

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 Try a Deep Search

 Draft an outline

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 Try the Consensus Meter

hypertension pregnancy induced AND labetalol AND methyldopa



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Pregnancy-induced hypertension (PIH) is a significant medical concern during pregnancy, contributing to maternal and fetal morbidity and mortality. Two commonly used antihypertensive medications for managing PIH are labetalol and methyldopa. This summary provides an overview of the efficacy and safety of these medications based on recent research findings.

Efficacy of Labetalol vs. Methyldopa

- **Blood Pressure Control:** Labetalol has been shown to reduce both systolic and diastolic blood pressure more rapidly and effectively than methyldopa in patients with pregnancy-induced hypertension. Studies consistently report a significant fall in mean arterial pressure (MAP) with labetalol compared to methyldopa, indicating superior efficacy in controlling blood pressure [1](#) [2](#) [4](#) [6](#) [9](#).
- **Time to Control Blood Pressure:** The time required to achieve optimal blood pressure control is generally shorter with labetalol compared to methyldopa. For instance, one study reported that the mean time to control blood pressure was approximately 36.97 hours with labetalol, compared to 42.22 hours with methyldopa [2](#) [4](#) [7](#).

Side Effects and Safety

↓ Results

- **Maternal Side Effects:** Labetalol is associated with fewer maternal side effects compared to methyldopa.

Results

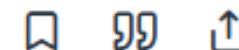
**1 Use of labetalol and methyldopa in pregnancy-induced hypertension.**

Labetalol effectively lowers blood pressure in pregnant women with pregnancy-induced hypertension, improving daily BP control without harming the foetus.



➡ Non-RCT

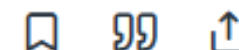
1979 · 62 citations · G. Lamming et al. ·  *British journal of clinical pharmacology*

**2 The Efficacy of Labetalol and Methyldopa in Treatment of Pregnancy Induced Hypertension**

Labetalol is more effective than methyldopa in treating pregnancy-induced hypertension, with less maternal and fetal side-effects.



2023 · 0 citations · Dr. Kamrun Nahar et al. ·  *Scholars Journal of Applied Medical Sciences*

**3 Relation Between Labetalol and Methyldopa in Treatment of Pregnancy Induced Hypertension**



Paper



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Published 1979 · G. Lamming, E. Symonds

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Overview

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Abstract

1 Nineteen pregnant patients whose mean arterial pressure (MAP) was persistently greater than or equal to 103.3 mmHg were given labetalol or methyldopa. 2 Significant falls (P less than 0.001) in BP only occurred in the group treated with labetalol, and daily BP control was better in this group. 3 Two severely hypertensive patients were



Corpus ID: 22549257

Use of labetalol and methyldopa in pregnancy-induced hypertension

G. Lamming, E. Symonds

TLDR Slight breathlessness, but drowsiness, headache and daily BP control

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Use of labetalol and methyldopa in pregnancy-induced hypertension

G D Lamming, E B Symonds

PMID: 526404 PMCID: [PMC1429744](#)*Br. J. clin. Pharmac.* (1979), **8**, 217S-222S

USE OF LABETALOL AND METHYLDOPA IN PREGNANCY-INDUCED HYPERTENSION

G.D. LAMMING & E.M. SYMONDS

Department of Obstetrics and Gynaecology, City Hospital, Hucknall Road, Nottingham NG5 1PB, UK

- 1 Nineteen pregnant patients whose mean arterial pressure (MAP) was persistently ≥ 103.3 mmHg were given labetalol or methyldopa.
- 2 Significant falls ($P < 0.001$) in BP only occurred in the group treated with labetalol, and daily BP control was better in this group.
- 3 Two severely hypertensive patients were successfully treated with intravenous labetalol.
- 4 There was a higher incidence of spontaneous labour in the labetalol group and a significant difference ($P < 0.05$) in the Bishop score of the cervix between the two groups.
- 5 There were no apparent detrimental effects on the foetus antenatally, during labour or post partum.
- 6 Slight breathlessness in one patient treated with labetalol was the only side-effect observed but drowsiness, headache and postural hypotension were reported in patients receiving methyldopa.

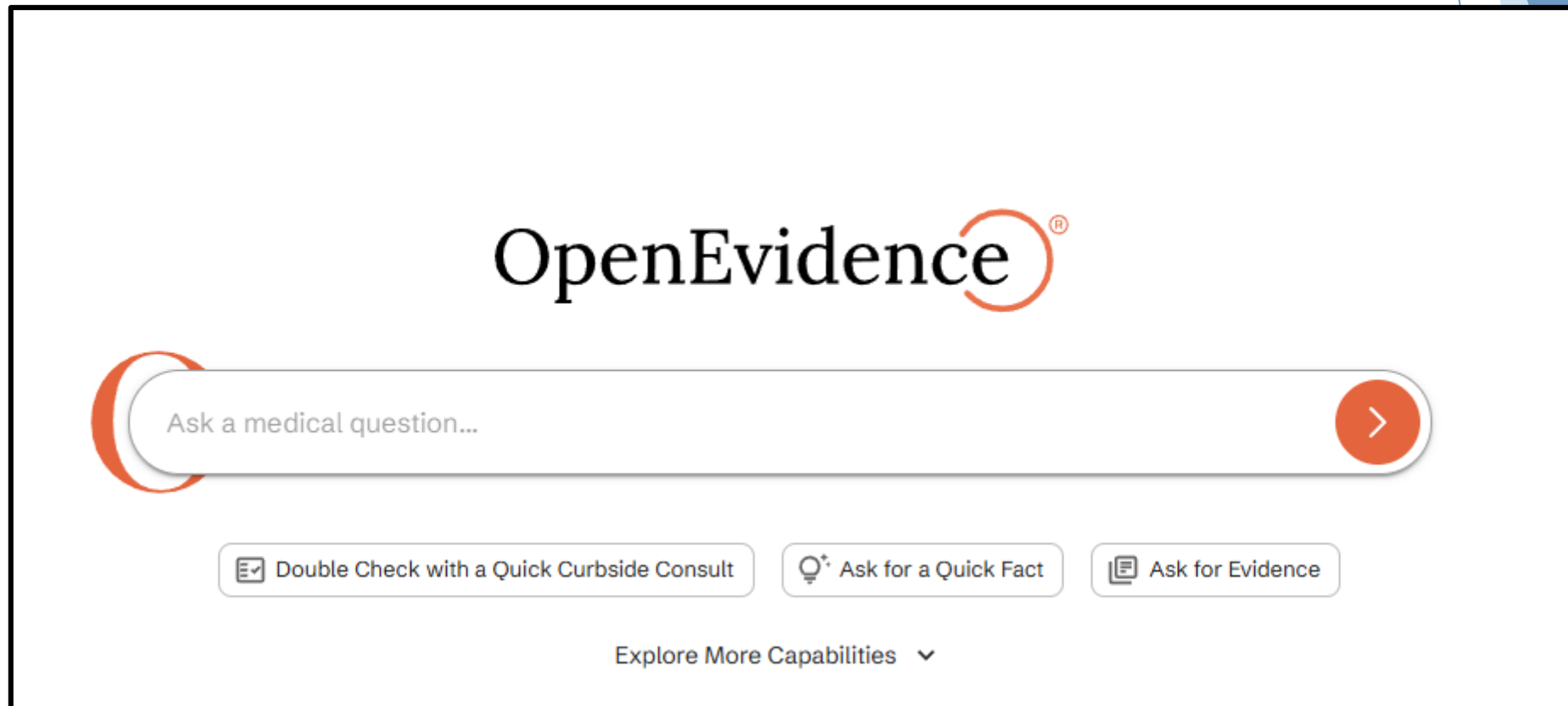
Introduction

THE use of anti-hypertensive agents in pregnancy is controversial. Most obstetricians agree that drug therapy has little place in the management of mild hypertension occurring late in the third trimester. Perinatal mortality has been shown to be lower in mild pregnancy-induced hypertensive patients than in the total hospital population (Symonds, 1979). When moderate or severe hypertension occurs with

study comparing the use of labetalol and methyldopa (Aldomet; Merck, Sharp & Dohme) in the treatment of pregnancy-induced hypertension. In addition two patients received intravenous labetalol as treatment for fulminating hypertension during pregnancy.

Methods

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The image shows a mockup of the OpenEvidence user interface. At the top center is the OpenEvidence logo, which consists of the word "OpenEvidence" in a black serif font followed by a red circular icon with a white dot inside. Below the logo is a large, rounded rectangular input field with a light gray border. Inside the field, the placeholder text "Ask a medical question..." is displayed in a light gray font. To the left of the input field is a red circular icon with a white dot inside, and to the right is a red circular button with a white right-pointing chevron. Below the input field are three rounded rectangular buttons with light gray borders. The first button contains a checklist icon and the text "Double Check with a Quick Curbside Consult". The second button contains a lightbulb icon and the text "Ask for a Quick Fact". The third button contains a document icon and the text "Ask for Evidence". At the bottom center of the interface is the text "Explore More Capabilities" followed by a small downward-pointing chevron.

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Hypertension, pregnant

Expanded question: What are

Labetalol and methyldopa
induced hypertension, and

Labetalol is a non-selective
effective in reducing the r
meta-analysis found that
compared to placebo or n
risk of proteinuria/preecl
However, there is some ev
small-for-gestational-age

Methyldopa, an alpha-2 ad
has been shown to reduce

References

1. [Oral Antihypertensive Treatment During Pregnancy: A Systematic Review and Network Meta-Analysis.](#)

Hup RJ, Damen JAA, Terstappen J. et al.

American Journal of Obstetrics and Gynecology
doi:10.1016/j.ajog.2025.04.010

[New Research](#)

2. [Oral Antihypertensive Treatment During Pregnancy: A Systematic Review and Network Meta-Analysis.](#)

Bone JN, Sandhu A, Abalos E, et al.
Hypertension (Dallas, Tex. : 2003)

[Leading Journal](#)

3. [Maternal and Neonatal Outcomes of Antihypertensive Treatment in Pregnancy: A Retrospective Cohort Study.](#)

Dublin S, Idu A, Avalos L, et al.
PloS One. 2022;17(5):e0268284.

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Maternal and neonatal outcomes of antihypertensive treatment in pregnancy: A retrospective cohort study

Sascha Dublin^{1 2}, Abisola Idu¹, Lyndsay A Avalos³, T Craig Cheetham⁴, Thomas R Easterling⁵,
Lu Chen¹, Victoria L Holt², Nerissa Nance³, Zoe Bider-Canfield⁶, Romain S Neugebauer³,
Kristi Reynolds⁶, Sylvia E Badon³, Susan M Shortreed^{1 7}

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PMID: 35576217 PMCID: PMC9109931 DOI: 10.1371/journal.pone.0268284

ACTIONS

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Conclusión

- ▶ La inteligencia artificial ya no es una visión del futuro, sino una parte integral de nuestro presente. A medida que abrazamos las comodidades y mejoras que la IA aporta a nuestra vida diaria, es esencial mantenernos informados y conscientes de su impacto, a fin de aprovechar al máximo esta asombrosa tecnología mientras navegamos por un mundo cada vez más interconectado e inteligente.
- ▶ Las herramientas de IA en la búsqueda de artículos médicos permiten procesar grandes volúmenes de datos en tiempo récord. Identificando estudios relevantes y realizando síntesis de la evidencia disponible.

Muchas gracias

Fernanda.cuneo@fcm.unc.edu.ar