

Patient preferences change the interpretation of trial results: An explainer

People prefer different treatments based on what is important to them, for example, avoiding health outcomes, like developing severe high blood pressure, or interventions, like taking blood pressure lowering medication. This study looked at how incorporating individual preferences changed the results of the Control of Hypertension in Pregnancy Study (CHIPS) trial,¹ a large randomized controlled trial (RCT) looking at how to best manage high blood pressure in pregnancy.

Most people fit into one of three preference groups

Earlier research² found that when considering how to manage high blood pressure (BP) in pregnancy, most people identify with one of three groups of preferences

1. Unclear Priority

I'm not sure what's most important to me when choosing how to manage high BP during my pregnancy.



2. Early Delivery

The most important thing to me is lowering the chance that my baby is born before 34 weeks



3. Medication

The most important thing to me is lowering the chance that I have to take medication for my high BP



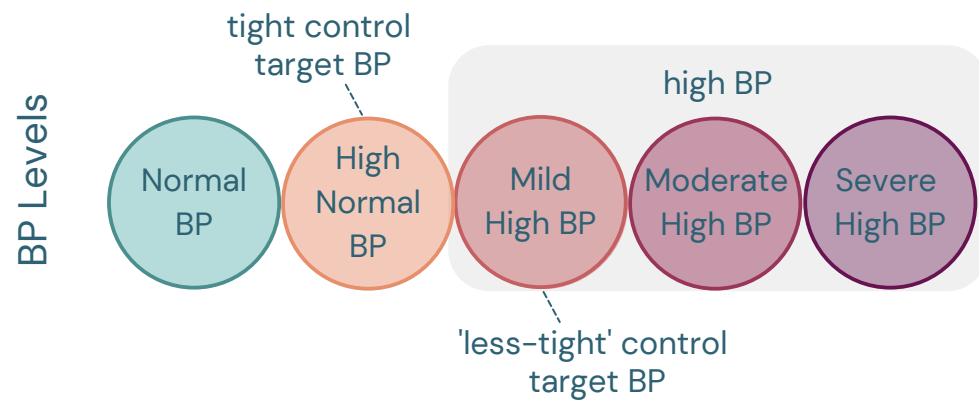
Each group prioritized avoiding different outcomes & interventions

taking medication severe high BP pre-eclampsia blood transfusion caesarean section delivery before 34 weeks baby born smaller than expected

This study combined these priorities with CHIPS trial data...

The CHIPS trial is the most recent large RCT comparing two strategies for managing high BP in pregnancy.

The CHIPS trial compared 'tight' control and 'less-tight' control



'Tight' control aims to lower BP so that it is in the normal to the high normal range.

'Less-tight' control aims to minimize medication. Intervention only happens if mild high BP becomes moderate to severe.

'Tight control' is the approach recommended by current international guidelines.

...and found that which management strategy is best depends on individual priorities

1. Unclear Priority

For those who aren't sure what is most important, neither 'tight' control nor 'less-tight' control was better.

no difference

2. Early Delivery

For those who prioritized avoiding delivery before 34 weeks, 'tight' control was the better strategy.

'tight' control

3. Medication

For those who prioritized avoiding taking medication for high BP, 'less-tight' control was the better strategy.

'less-tight' control

So, what does this mean for me?

The findings from this study show that no single intervention is best for everyone. Instead, the intervention that is best for each person depends on what is important to them.

If you have high BP in pregnancy, talk to your doctor about what's important to you.

References

1. Magee, L.A., et al. "Less-tight versus tight control of hypertension in pregnancy." N Engl J Med (2015): 407-417.
2. Metcalfe, R.K., et al. "Patient preferences and decisional needs when choosing a treatment approach for pregnancy hypertension: a stated preference study." Can J Cardiol 36.5 (2020): 775-779.
3. World Health Organization. "WHO recommendations on drug treatment for non-severe hypertension in pregnancy." (2020).

