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**Short Communication** 

# Pregnancy and Air Travel

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This is an important topic where lots of pregnant women are confused about what to do and what not to when it comes to air travel. This write-up might be useful to all pregnant women who are considering air travel and for those who are planning to travel short-haul of less than 4 hours or long haul of more than 4 hours.

#### Is air travel harmful to the baby?

It is not proven that changes in air pressure, traveling by jet speed, or flying at the usual passenger aircraft altitude have any deleterious effect on the growing baby in your uterus [2,3].

Noise, cosmic radiation and ultraviolet radiation have not been found to be adversely affecting the mother or fetus in any way [7,8].

Air travel doesn't increase chances of miscarriages, early labour or early water break [3].

#### The safest time to travel

You can safely travel till 34 weeks of pregnancy; few airlines allow you to travel till 36 weeks also [1]. If you have twin or triplet babies, it is generally considered safe to travel by air only till 32 to 34 weeks of pregnancy.

These recommendations are meant for uncomplicated pregnancies. A gynecologist should be consulted for complicated pregnancies.

An important point to note here is that you should never get into any argument with the airline staff to travel beyond the allowed weeks of pregnancy as it depends upon their capability of responding to any kind of obstetric emergency, if needed.

## What can be problematic while I travel?

The combination of in-craft environmental conditions, such as changes in cabin pressure and low humidity, and the physiologic changes of pregnancy can lead to adaptations in pregnant women.

These adaptations include an increase in heart rate and blood pressure, as well as a significant decrease in aerobic capacity [5,6].

- Your morning sickness can aggravate, more so if you are on medication for the same.
- Pedal swelling may appear or it may increase.
- You may experience nasal stuffiness, blocked ears or dizziness at the time of landing or take off due changes in cabin pressure.
- Humidity levels in flight are close to 15%. Though it cannot cause dehydration, but it is imperative to keep yourself hydrated while air travel.
- Never use a tight safety belt. Always ask for an extension to accommodate your growing belly.

### The concern of deep vein thrombosis

It is a well-known fact that prolonged stagnation causes blood stasis and may cause clot formation in lower limbs. This phenomenon is exaggerated in pregnancy and in patients with a history of deep vein thrombosis. But there is nothing to be worried about.

Following precautions need to be taken:

- Keep taking any medicines prescribed by your gynecologist.
- Preferably take an aisle seat to facilitate ease of movement.
- Keep moving your arms, knees, and feet at regular intervals.
- Make a point to walk around the cabin frequently when the safety crew allows you to do so [1].
- Reduce coffee and tea intake.
- You are recommended to wear graduated stockings over both lower limbs on long haul flights of more than 4 hours and if especially advised by your gynecologist.
- Drink plenty of fluids during the flight to prevent dehydration and promote good circulation.
- Bring healthy snacks like nuts, fruits, and homemade food to keep your energy levels up during the flight.

 Invest in a travel neck pillow to support your neck and head during the flight. If you're flying in a seat with a lie-flat bed, pack your pregnancy pillow.

Staying active during air travel while pregnant can help prevent blood clots and promote good circulation. Here are some safe exercises to do during air travel while pregnant:

- Walking: Walking up and down the aisle of the plane every half hour or so can help keep blood flowing and prevent blood clots.
- Stretching: Stretching your legs, feet, and arms while seated can help prevent stiffness and promote good circulation.
   You can also try shoulder rolls, neck stretches, and ankle circles.
- Leg exercises: Pointing your toes downward and upward and flexing your feet can help prevent blood clots. You can also try leg lifts and ankle rotations.
- Pelvic tilts: Pelvic tilts can help relieve lower back pain and promote good posture during the flight. Sit up straight and tilt your pelvis forward and backward.
- Kegels: Kegel exercises can help strengthen your pelvic floor muscles and prevent urinary incontinence during and after pregnancy. Squeeze your pelvic floor muscles as if you're trying to stop the flow of urine.

#### Concern regarding body scanners and X-Rays in airports

Body scanners are not harmful to the fetus or the mother and also, they do not increase the risk of having any complications in pregnancy [8].

Please tell the airport staff regarding your pregnancy if you are subjected to separate X-rays installed at some airports. Though they are not proven to cause any problems in the mother or the baby as they contain a very low dose of radiation; but still it's recommended to avoid them.

# Bibliography

- 1. ACOG Committee Opinion No. 746: Air Travel During Pregnancy: Obstetrics and Gynecology.
- 2. Air travel during pregnancy and the risk of adverse pregnancy outcomes as gestational age and weight at birth NCBI.
- Air travel and pregnancy patient information leaflet RCOG May 2015; updated May (2022).
- 4. Freeman M., et al. "Does air travel affect pregnancy outcome?" *Archives of Gynecology and Obstetrics* 269 (2004): 274-247.
- 5. Huch R., *et al.* "Physiologic changes in pregnant women and their fetuses during jet air travel". *American Journal of Obstetrics and Gynecology* 154 (1986): 996-1000.

- 6. Artal R., et al. "A comparison of cardiopulmonary adaptations to exercise in pregnancy at sea level and altitude". American Journal of Obstetrics and Gynecology 172 (1995): 1170-1178; discussion 1178-1180.
- 7. Morrell S., et al. "A review of health effects of aircraft noise". Australian and New Zealand Journal of Public Health 21 (1997): 221-236.
- 8. Barish RJ. "In-flight radiation exposure during pregnancy". *Obstetrics and Gynecology* 103 (2004): 1326-1330.