METABOLIC DISORDERS DURING PREGNANCY AND THEIR MANAGEMENT THROUGH AYURVEDA

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ABSTRACT

Pregnancy imposes significant metabolic demands on the mother. Metabolic disorders such as gestational diabetes mellitus (GDM), hypothyroidism, dyslipidaemia, and obesity have increased in prevalence and threaten maternal–foetal health. Ayurveda, the ancient Indian system of medicine, offers dietary, lifestyle, and herbal interventions that can be safely integrated into antenatal care. This review highlights the common metabolic disorders of pregnancy and outlines Ayurvedic strategies to address them.

INTRODUCTION

Metabolism undergoes profound adaptations during pregnancy to meet maternal and foetal requirements. Hormonal changes, increased nutrient demands, and altered insulin sensitivity can predispose women to metabolic disturbances. These conditions are associated with pre-eclampsia, macrosomia, preterm delivery, and long-term metabolic sequelae in offspring.[1] Ayurveda emphasizes garbhini paricharya (antenatal care) to maintain maternal–fetal health, focusing on balanced doshas, adequate ahara (diet), vihara (lifestyle), and safe herbal formulations.[2]

Common Metabolic Disorders During Pregnancy

Gestational Diabetes Mellitus (GDM)

Glucose intolerance first detected during pregnancy; increases risk of caesarean delivery, neonatal hypoglycaemia, and future diabetes.[3]

Hypothyroidism

Characterized by reduced thyroid hormone production; may impair foetal neurodevelopment and is linked to miscarriage and pre-eclampsia.[4]

Dyslipidaemia and Obesity

Elevated triglycerides, cholesterol, and excessive gestational weight gain predispose to gestational hypertension and metabolic syndrome in offspring.[5]

Nutrient Utilization Disorders

Iron, B12, and folate deficiencies represent metabolic disturbances in nutrient absorption/utilization.[6]

Ayurvedic Perspective

In Ayurveda, pregnancy is a state of garbhini avastha requiring raksha (protection) and special regimens. Excess kapha and impaired agni (digestive/metabolic fire) underlie most metabolic disorders. Conditions such as prameha (a broad term including dysglycemia) and medo dhatu dushti (disturbed fat metabolism) parallel gestational diabetes and dyslipidaemia, respectively.[7]

Ayurvedic Interventions

1. Dietary Management (Ahara)

Prefer laghu (light) and madhura-tikta-kashaya rasa (sweet-bitter-astringent) foods such as green leafy vegetables, barley (yava), horse gram (kulattha), and millets.

Avoid excessive refined carbohydrates, deep-fried, and kapha-promoting foods.

Include natural omega-3 sources (flaxseeds, walnuts) and antioxidant-rich fruits.

Maintain regular meal timings with small, frequent meals to stabilize blood sugar.[8]

2. Lifestyle Management (Vihara)

Gentle prenatal yoga and garbhini yoga asanas under expert supervision to enhance insulin sensitivity and lipid metabolism.

Adequate rest but avoidance of prolonged inactivity.

Stress reduction with meditation and pranayama such as anulom-vilom.[9]

3. Safe Ayurvedic Formulations (Under Medical Supervision)

For dysglycemia / mild GDM: Nisha–amalaki churna (turmeric and amla) and Guduchi (Tinospora cordifolia) decoction.

For hypothyroid tendency: Kanchanara guggulu traditionally supports thyroid gland function.

For dyslipidemia/obesity: Triphala churna at bedtime supports digestion and lipid metabolism.[10]

4. Rasayana Therapy

Mild rasayana like Amalaki rasayana and Shatavari kalpa nourish the mother and fetus while balancing metabolism.[11]

Preventive Strategies

Preconception counseling for women with pre-existing metabolic risks.

Regular antenatal check-ups integrating Ayurvedic diet and lifestyle advice.

Collaboration between obstetricians and qualified Ayurvedic practitioners ensures safety and efficacy.[12]

CONCLUSION

Metabolic disorders during pregnancy threaten maternal and foetal health but can be mitigated with prompt attention. Ayurveda offers a time-tested, holistic approach through personalized diet, lifestyle, and safe herbal formulations. Integrating Ayurvedic principles with modern antenatal care can improve outcomes and promote long-term wellness for both mother and child.

REFERENCES

1. Catalano PM. Obesity, insulin resistance, and pregnancy outcome. Reproduction. 2010; 140(3): 365–371.
2. Sharma PV. Charaka Samhita (Sutrasthana). Chaukhamba Orientalia; 2014.
3. American Diabetes Association. Gestational Diabetes Mellitus. Diabetes Care. 2022; 45(1): S244–S250.
4. Casey BM, Leveno KJ. Thyroid disease in pregnancy. Obstet Gynecol. 2006; 108(5): 1283–1292.
5. Herrera E, Ortega-Senovilla H. Lipid metabolism during pregnancy and its implications for fetal growth. Curr Pharm Biotechnol. 2014; 15(1): 24–31.
6. Milman N. Iron and pregnancy—a delicate balance. Ann Hematol. 2006; 85(9): 559–565.
7. Vagbhata. Ashtanga Hridaya (Sutrasthana). Chaukhamba Krishnadas Academy; 2017.

8. Tiwari S, Gehlot S. Ayurvedic dietary regimen in pregnancy: a review. AYU. 2012; 33(3): 334–339.

9. Field T. Yoga clinical research review. Complement Ther Clin Pract. 2011; 17(1): 1–8.

10. Kumar A, Jha SK. Clinical evaluation of Nisha–Amalaki Churna in pre-diabetic state. J Res Ayurveda Siddha. 2018; 39(2): 112–119.

11. Singh RH. Rasayana Therapy in Ayurveda. Chaukhamba Sanskrit Series; 2015.

12. Patwardhan B. Bridging Ayurveda with modern concepts of health and disease. Curr Sci. 2014; 107(9): 1490–1495.