

**CONCEPT OF ANUVANSHIKI SIDDHANTA: AN AYURVEDIC PERSPECTIVE ON
HEREDITY AND GENETICS****Dr. Shubham S. Zodpe^{1*}, Prof. Dr. Vinod M. Choudhari²**¹MD Scholar, Department of Rachana Sharir, Shri Ayurved Mahavidyalaya, Nagpur, Maharashtra, India.²Guide & HOD, Department of Rachana Sharir, Shri Ayurved Mahavidyalaya, Nagpur, Maharashtra, India.***Corresponding Author: Dr. Shubham S. Zodpe**

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ABSTRACT

Anuvanshiki Siddhanta is the Ayurvedic concept explaining heredity and transmission of traits from one generation to another. Ancient Ayurvedic Acharyas described the principles of inheritance centuries before the emergence of modern genetics. Concepts such as Beeja, Beejabhaga and Beejabhagavayava resemble the modern understanding of gametes, chromosomes and genes respectively. Ayurvedic classics also describe hereditary disorders, congenital anomalies, infertility and developmental deformities resulting from defects in these hereditary units. The present review critically evaluates the concept of Anuvanshiki Siddhanta and correlates it with modern genetic principles. The review highlights the contribution of Ayurveda in understanding embryological development, inheritance and prevention of hereditary disorders.

KEYWORDS: Anuvanshiki, Beeja, Beejabhaga, Beejabhagavayava, Genetics, Heredity.**INTRODUCTION**

Inheritance is the biological process through which traits and characteristics are transmitted from parents to offspring. Modern genetics explains heredity through genes, chromosomes and DNA. However, long before the development of modern genetics, Ayurveda had already explained hereditary transmission through concepts such as Beeja, Beejabhaga and Beejabhagavayava.^[1-4] Anuvanshiki Siddhanta is an important concept described in Ayurveda dealing with hereditary transmission and congenital abnormalities.^[5,6]

Historical Background

Ancient Ayurvedic classics such as Charaka Samhita and Sushruta Samhita contain detailed descriptions regarding embryology, inheritance and congenital abnormalities.^[7,8] Ayurvedic Acharyas recognized that defects in reproductive elements can result in infertility, deformities and hereditary diseases.^[9] Ayurveda also emphasizes individualized constitution (Prakriti), which resembles the modern concept of phenotype and genetic individuality.^[10-12]

Figure 1 Comparison: Ayurveda and Modern Genetics

Aspect	Ayurvedic View	Modern Genetic View
Basic Unit	Beeja (Reproductive seed)	Gamete (Sperm/Ovum)
Structural Unit	Beejabhaga (Part of Beeja)	Chromosome
Functional Unit	Beejabhagavayava (Sub-part of Beejabhaga)	Gene (DNA segment)
Information Carrier	Beejabhagavayava carries information for traits	Genes carry information for traits
Inheritance	Transmission of qualities through Beeja	Transmission of genes from parents to offspring
Abnormality	Dushti in Beeja / Beejabhaga / Beejabhagavayava	Mutation in genes or chromosomes
Objective	Supraja Janana (Healthy progeny)	Healthy offspring and genetic well-being

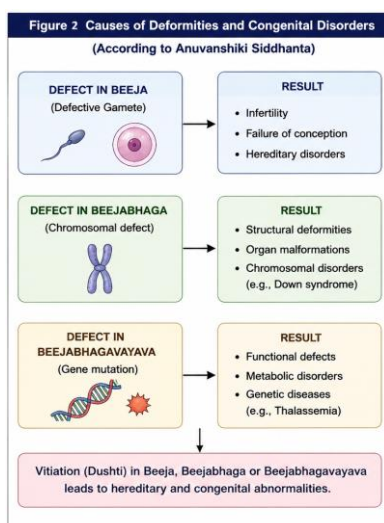
***Original illustration prepared based on classical Ayurvedic texts and modern genetics literature**

Concept of Beeja, Beejabhaga and Beejabhagavayava

Beeja refers to the reproductive seed responsible for formation of progeny and can be correlated with gametes such as sperm and ovum.^[13] Beejabhaga refers to a subdivision of Beeja responsible for development of specific organs and structures and is comparable to chromosomes.^[14] Beejabhagavayava refers to further subdivisions of Beejabhaga responsible for specific hereditary traits and resembles genes.^{15,16} Ayurvedic literature explains that defects in these hereditary units lead to abnormalities in embryological development and congenital disorders.^[17]

Anuvanshiki Siddhanta and Embryological Development

Embryological development begins with the union of Shukra and Shonita inside the uterus resulting in formation of Garbha. Ayurveda describes Matrija Bhava, Pitrija Bhava, Atmaja Bhava, Satmyaja Bhava, Rasaja Bhava and Satvaja Bhava which collectively influence fetal development.^[18-20] The hereditary characteristics are transferred through Beeja, Beejabhaga and Beejabhagavayava during embryogenesis.^[21]



***Original illustration prepared based on classical Ayurvedic texts and modern genetics literature**

Hereditary and Congenital Disorders

Ayurvedic classics describe various hereditary and congenital disorders caused due to abnormalities in hereditary units.^[22] Defects in Beeja may result in

infertility, defects in Beejabhaga may cause organ deformities, while defects in Beejabhagavayava may lead to partial developmental abnormalities.^[23,24] Conditions such as Vandhya Praja, Putipraja, Varta and Trinaputrika

are described in Ayurveda and can be correlated with congenital and chromosomal abnormalities described in modern medicine.^[25-27]

Correlation with Modern Genetics

Modern genetics explains heredity through chromosomes, genes and DNA. Genes carry biological information responsible for physical and physiological characteristics. Ayurveda explained hereditary transmission philosophically through Beeja, Beejabhaga and Beejabhagavayava.^[28] Beeja can be correlated with gametes, Beejabhaga with chromosomes and Beejabhagavayava with genes.^[29,30]

Preventive Aspects in Ayurveda

Ayurveda emphasizes preventive measures for healthy progeny (Supraja Janana). Proper Ahara, Vihara, Dinacharya, Ritucharya and Garbhini Charya are advised to maintain purity of reproductive elements and prevent hereditary defects.^[31-33] Psychological well-being during conception and pregnancy is also considered important in Ayurveda.^[34]

DISCUSSION

Anuvanshiki Siddhanta demonstrates the advanced understanding of heredity in Ayurveda. Ancient Ayurvedic scholars described hereditary transmission, congenital anomalies and infertility due to defects in reproductive factors centuries before the discovery of genes and chromosomes. Modern genetics provides molecular explanations through DNA and chromosomes, whereas Ayurveda explained hereditary observations philosophically and clinically. The similarities between Ayurvedic concepts and modern genetics indicate the scientific depth of Ayurvedic embryology and hereditary science.^[35]

CONCLUSION

Anuvanshiki Siddhanta is an important Ayurvedic concept dealing with heredity, inheritance and embryological development. The concepts of Beeja, Beejabhaga and Beejabhagavayava closely resemble modern concepts of gametes, chromosomes and genes. Ayurvedic classics provide detailed descriptions regarding hereditary disorders, congenital anomalies and factors affecting healthy progeny. Correlation between Ayurveda and modern genetics reveals the profound scientific understanding present in ancient Ayurvedic literature.

REFERENCES

- Acharya Agnivesha. Charaka Samhita. Sharira Sthana. Varanasi: Chaukhamba Sanskrit Series, 2015.
- Sushruta. Sushruta Samhita. Sharira Sthana. Varanasi: Chaukhamba Orientalia, 2014.
- Vagbhata. Ashtanga Hridaya. Varanasi: Chaukhamba Surbharati Prakashan, 2016.
- Suseelan IC, Harshitha MS. Anuvamshiki Siddhanta – The Concept of Inheritance through an Ayurvedic Perspective. Int Ayurvedic Med J., 2017; 5(9): 3482-6.
- Thankachan S, Kulkarni BG, Dayana H. Ancient Overview of Modern Genetics as Per Ayurveda: A Review. J Pharm Res Int., 2021; 33(37B): 191-6.
- Sharma S, Sakshi, Upadhyay S. Acharya Charaka's Analysis on Anuvanshiki Siddhanta in Ayurveda. Int J Ayu Pharm Chem., 2018; 9(2): 396-401.
- R.K.Sharma, Bhagwan Das(2012). Edited Charaka Samhita Shaarir Sthana(Part 2, 4/30). Varanasi-Chaukhambha Sanskrit Series Office, 402.
- Sushruta. Sushruta Samhita. Sharma PV, editor. Varanasi: Chaukhambha Visvabharati; 2012. Sharirasthana 3/4.
- Vagbhata. Ashtanga Hridaya. Murthy KRS, editor. Varanasi: Chaukhambha Krishnadas Academy, 2014. Sharirasthana 1/5.
- Guyton AC, Hall JE. Textbook of Medical Physiology. 14th ed. Philadelphia: Elsevier, 2021.
- Inderbir Singh. Human Embryology. 12th ed. New Delhi: Jaypee Brothers, 2020.
- Langman J. Medical Embryology. 14th ed. Philadelphia: Wolters Kluwer, 2019.
- R.K.Sharma ,Bhagwan Das(2012). Edited Charaka Samhita Shaarir Sthana (part 2, 2/29-30). Varanasi-Chaukhambha Sanskrit Series Office. 359.
- Sushruta. Sushruta Samhita. Sharma PV, editor. Varanasi: Chaukhambha Visvabharati; 2012. Sharirasthana 2/35.
- Thompson MW, McInnes RR, Willard HF. Genetics in Medicine. 8th ed. Philadelphia: Saunders, 2016.
- Jorde LB, Carey JC, Bamshad MJ. Medical Genetics. 5th ed. Philadelphia: Elsevier, 2019.
- Sood T. Severe Combined Immune Deficiency – An Ayurvedic Aspect with Reference to Anuvanshik Vyadhi and Oja Kshaya. Ayushdhara, 2022; 9(2): 107-11.
- R.K.Sharma, Bhagwan Das(2012). Edited Charaka Samhita Shaarir Sthana (part 2, 8/4). Varanasi-Chaukhambha Sanskrit Series Office.
- R.K.Sharma, Bhagwan Das(2012). Edited Charaka Samhita Shaarir Sthana (part 2, 8/12). Varanasi-Chaukhambha Sanskrit Series Office.
- Sushruta. Sushruta Samhita. Sharma PV, editor. Varanasi: Chaukhambha Visvabharati; 2012. Sharirasthana 5/3.
- Sharma S, et al. Genetics in Ayurveda. Int J Ayu Pharm Chem., 2018; 9(2): 396-401.
- Bhavamishra. Bhavaprakasha. Varanasi: Chaukhamba Sanskrit Bhawan, 2013.
- Yogaratanakara. Varanasi: Chaukhamba Sanskrit Series, 2012.
- Sharangadhara. Sharangadhara Samhita. Varanasi: Chaukhamba Orientalia, 2011.
- Ganong WF. Review of Medical Physiology. 26th ed. New York: McGraw Hill, 2019.
- Harsh Mohan. Textbook of Pathology. 8th ed. New Delhi: Jaypee Brothers, 2019.
- Davidson S. Davidson's Principles and Practice of Medicine. 24th ed. Elsevier, 2022.

28. Snell RS. Clinical Embryology. 9th ed. Philadelphia: Lippincott Williams & Wilkins, 2018.
29. Sinha U, Sinha S. Essentials of Medical Genetics. New Delhi: Jaypee Brothers, 2017.
30. NCERT. Biology Textbook Class XII: Genetics and Evolution. New Delhi: NCERT, 2021.
31. Park K. Preventive and Social Medicine. 26th ed. Jabalpur: Banarsidas Bhanot, 2021.
32. WHO. Global Report on Traditional and Complementary Medicine. Geneva: World Health Organization, 2019.
33. Nelson WE. Nelson Textbook of Pediatrics. 21st ed. Philadelphia: Elsevier, 2020.
34. Tripathi KD. Essentials of Medical Pharmacology. 8th ed. New Delhi: Jaypee Brothers, 2019.
35. Modern Genetics and Ayurveda Correlation Review. JPRI., 2021; 33(37B): 191-6.