



## Conceptual Study of Atulya Gotra and Consanguineous Marriages

Gune PA<sup>1\*</sup>, Deshpande MS<sup>2</sup>


DOI:10.21760/jaims.10.8.10

<sup>1\*</sup> Pallavi A Gune, PhD Scholar, Tilak Ayurved Mahavidyalaya, Pune and Professor and HOD, Dept of Roga Nidana, Pradeep Patil Ayurvedic Medical College, Khutalwadi, Maharashtra, India.

<sup>2</sup> Manjiri S Deshpande, Professor and HOD, Dept of Roga Nidana, Tilak Ayurved Mahavidyalaya, Pune, Maharashtra, India.

In Ayurveda consanguineous marriages that is Sagotra Vivah mentioned and also mentioned the risk of such marriages. This article is the conceptual review of Ayurveda and modern text of Sagotra Vivah. In this article one example of bleeding disorder - Hemophilia and its risk factor is also mentioned to elaborate the concept.

**Keywords:** Sagotra Vivah, consanguineous marriage, genetic disorder, hemophilia, Atulya Gotriya

Corresponding Author	How to Cite this Article	To Browse
Pallavi A Gune, PhD Scholar, Tilak Ayurved Mahavidyalaya, Pune and Professor and HOD, Dept of Roga Nidana, Pradeep Patil Ayurvedic Medical College, Khutalwadi, Maharashtra, India. Email: <a href="mailto:drpallavigune@gmail.com">drpallavigune@gmail.com</a>	Gune PA, Deshpande MS, <a href="#">Conceptual Study of Atulya Gotra and Consanguineous Marriages</a> . J Ayu Int Med Sci. 2025;10(8):52-55. Available From <a href="https://jaims.in/jaims/article/view/4553/">https://jaims.in/jaims/article/view/4553/</a>	

**Manuscript Received**  
2025-06-20

**Review Round 1**  
2025-06-27

**Review Round 2**  
2025-07-07

**Review Round 3**  
2025-07-17

**Accepted**  
2025-07-27

**Conflict of Interest**  
None

**Funding**  
Nil

**Ethical Approval**  
Not required

**Plagiarism X-checker**  
11.78

**Note**



© 2025 by Gune PA, Deshpande MS and Published by Maharshi Charaka Ayurveda Organization. This is an Open Access article licensed under a Creative Commons Attribution 4.0 International License <https://creativecommons.org/licenses/by/4.0/> unported [CC BY 4.0].



## Introduction

In *Ayurveda* the genetic disorders are explained as *Beej Dushtijanya Vikara*. *Beej*, *Beejbhaga*, *Beejbhaga Avayava* are identified as certain fundamental entities, which are responsible for reproduction. This is highly evolved concept of genetics which fortunately simulates with the contemporary concept of genetics dealt by *Acharya Charak* in *Sharir Sthan* 1. For a healthy progeny, *Ayurveda* felt the importance of Six Procreative Factors (*Shad Garbhakara Bhavas*) such as *Matrija* (maternal), *Pitrija* (paternal), *Atmaja* (Soul), *Rasaja* (Nutritional), *Satmyaja* (Wholesomeness), and *Sattvaja* (Psych / Mind). These *Shad Garbhakara Bhavas* are must for healthy progeny. Healthy parents, practice of a wholesome regimen, and a healthy mind (Psychological status of parents) play an important role in achieving a healthy offsprings i.e., *Apatya* and *Santan* means further progenies by *Acharya Charak*. Thus, structuring a healthy family, society, and nation. Each procreative factor is assigned with a certain organogenesis / functional / psychological phenomenon, to develop in the forthcoming *Santati*, during its intrauterine life. A lag on the part of any of these *Garbhakar Bhavas* will lead to physical, functional or psychological defects, which can be contributed by the respective factor.

Hence there are many basic principles of *Ayurveda* which are applicable in current time. One important concept mentioned in classical text is *Atulya Gotriya Adhyaya*.

In this classical text *Acharya* mentioned the risk factors of *Sagotra Vivah*, importance of *Rutu Kshetra*, *Ambu* and *Beeja*, *Paricharya* for parents before conception, *Garbha Vikruti*, risk factors and solutions regarding genetic disorders according to ancient era. But in this modern era all these concepts are principally accepted and even followed for healthy progeny.

## Materials and Methods

1. *Atulya Gotriya Adhyaya* from *Charak Samhita*
2. Consanguineous marriages and risk factors
3. Risk of Hemophilia in Consanguineous Marriages

## Review of Literature

*Atulya Gotriya Adhyay*.

The "*Atulya Gotriya Adhyay*" is the 4th chapter of the *Charaka Samhita's "Sutra Sthana"* section. This chapter focuses on:

1. Classification of individuals: Based on their physical characteristics, mental status, and genetic predispositions.
2. Understanding individual constitutions: To provide personalized healthcare and treatment.

### Key Concepts

Some key concepts discussed in this chapter include:

1. *Prakriti*: The unique constitution or nature of an individual.
2. *Vikriti*: The deviation or imbalance from one's natural constitution.
3. *Sharira*: The physical body and its various components.

### Importance

The "*Atulya Gotriya Adhyay*" provides valuable insights into *Ayurvedic* philosophy and practice, emphasizing the importance of understanding individual constitutions for effective healthcare.

In *Ayurveda*, *Sagotra Vivaha* (सगोत्र विवाह) refers to marriage within the same *Gotra* (clan or lineage). Here are some contraindications:

### Contraindications

1. *Prakriti* imbalance: *Sagotra Vivaha* can lead to an imbalance of *Prakriti* (individual constitution), potentially causing health issues like immunity and *Vyadhikshamatva*
2. *Vikriti*: Marriage within the same gotra can perpetuate *Vikriti* (deviation from natural constitution), leading to physical and mental health problems.
3. *Karmaja Prabhav*: *Ayurvedic* texts suggest that *Sagotra Vivaha* can lead to *Karmaja Prabhav*, affecting the couple's spiritual growth and well-being. (philosophical concepts by *Ayurveda*)
4. Genetic disorders: Marriage within the same *Gotra* can increase the risk of genetic disorders, as the genetic pool is limited.

### Ayurvedic texts references

1. *Charaka Samhita*: *Sutrasthana*, Chapter 4, Verse 8-10.

2. Ashtanga Hridayam: Sutrasthana, Chapter 3, Verse 14-16.

3. Manu Smriti: Chapter 3, Verse 5-7.

Sexual intercourse within the same clan causes *Adharma*, thus contraindicated in *Dharmashastra*. [Chakrapani on *Cha. Sa. Sharira Sthana* 2/3] Hence *Atulyagotra* implies non-consanguineous cohabitation.

In modern context *Sagotra Vivah* means Consanguine marriage. Consanguine marriage is marriage between individuals who are closely related. In a clinical sense, marriage between two family members who are second cousins or closer qualifies as consanguineous marriage. This is based on the gene copies their offspring may receive.[1,2]

Multiple studies done and have established consanguinity as a high cause for congenital defects and abnormalities. A risk of autosomal recessive disorders increases in offspring coming from consanguineous marriages due to the increased similar or alike recessive genes from cognate parents. Inbreeding is associated with decreased cognitive abilities in children.[3]

Younger ages of marriage are commonly seen in consanguineous marriages, which may account for the increase in fertility seen in these unions. Chances of postnatal mortality are higher in offspring. The highest chance of death due to the risk of autosomal recessive genes. This is also the cause of health complications as children born from consanguinity enter adulthood.[4]

The primary medical concern with consanguineous marriages is the high risk of genetic disorders. When closely related individuals reproduce, there is a higher probability that both parents carry the same genetic mutations. This situation increases the risk of recessive genetic disorders in their children. Recessive disorders, such as hemophilia, thalassemia, etc., occur only if a child inherits two copies of the mutant gene, one from each parent. [5]

In consanguineous unions, the chances of both parents carrying the same recessive gene are significantly higher compared to non-consanguineous marriages. As a result, the incidence of autosomal recessive disorders is more frequent in populations where consanguinity is commonly practiced.[6]

Moreover, consanguinity can lead the reduction in overall genetic diversity within a family or community. This reduced genetic diversity can have broader implications beyond single-gene disorders.

[7] It may affect complex traits and the overall health of the population, potentially leading to reduced immunity i.e., *Janmaja Vyadhikshamatwa* according to *Ayurveda* and increased susceptibility to infectious diseases. Additionally, accumulation of deleterious mutations over generations can result in a higher prevalence of multifactorial diseases, such as heart disease and diabetes, which are influenced by both genetic and environmental factors.[8] In this review, we aimed to discuss current evidence regarding association between consanguineous marriages and genetic disorders and correlation according to *Ayurveda* as *Sagotra Vivah*.

Here is example of one of the bleeding disorder, Hemophilia in consanguineous marriages.

### **Risk of Hemophilia in Consanguineous Marriages**

1. First cousins: Marriage between first cousins increases the risk of hemophilia by 2-3 times.
2. Uncle-niece or aunt-nephew: Marriage between an uncle and niece or aunt and nephew increases the risk of hemophilia by 4-6 times.
3. Double first cousins: Marriage between double first cousins (children of two siblings who marry two other siblings) increases the risk of hemophilia by 8-10 times.

## **Discussion**

### **Why Consanguineous Marriage Increases Hemophilia Risk**

Increased chance of inherited mutations: When close relatives marry, they are more likely to carry the same genetic mutations, including those that cause hemophilia.

Reduced genetic diversity: Consanguineous marriage reduces genetic diversity, making it more likely that recessive genes, like those that cause hemophilia, will be expressed.

### **Prevalence of Hemophilia in Consanguineous Marriages**

Higher prevalence in certain populations: Consanguineous marriage/*Sagotra Vivah* is more common in certain populations,

Such as in some Middle Eastern and South Asian communities, where the prevalence of hemophilia may be higher.

Increased risk of severe hemophilia: Consanguineous marriage/*Sagotra Vivah* may increase the risk of severe hemophilia, as the likelihood of inheriting two copies of the mutated gene (one from each parent) is higher.

### Genetic Counseling and Testing

**Importance of genetic counseling:** Couples who are considering consanguineous marriage should undergo genetic counseling to understand their risk of having a child with hemophilia.

Hence in classical text of Ayurveda acharya mentioned it as *Vivah* should be *Atulya Gotra* means not in close relation or blood stream or with siblings or cousins.

**Genetic testing:** Genetic testing can identify carriers of hemophilia and help couples make informed decisions about their reproductive options.

It's essential to note that consanguineous marriage is not the sole cause of hemophilia, and many cases of hemophilia occur in families without a history of consanguineous marriage due to sudden genetic mutations i.e. called as sporadichemophilia.

## References

1. Hamamy H. Consanguineous marriages. J Community Genet. 2012;3(3):185–92. doi:10.1007/s12687-011-0072-y. PMID: 22109912; PMCID: PMC3419292 [Crossref][PubMed][Google Scholar]
2. Heidari F, Dastgiri S, Tajaddini N, et al. Prevalence and risk factors of consanguineous marriage. Eur J Gen Med [Internet]. 2014 Dec;11(4):248–55. Available from: Academic Search Complete, Ipswich, MA. Accessed 2016 Oct 4 [Crossref][PubMed][Google Scholar]
3. Maghsoudlou S, Cnattingius S, Bahmanyar S, et al. Consanguineous marriage, prepregnancy maternal characteristics and stillbirth risk: a population-based case-control study. Acta Obstet Gynecol Scand [Internet]. 2015 Oct;94(10):1095–101. Available from: Academic Search Complete, Ipswich, MA. Accessed 2016 Oct 25 [Crossref][PubMed][Google Scholar]
4. Bittles AH. The role and significance of consanguinity as a demographic variable. Popul Dev Rev. 1994;20(3):561–84. doi:10.2307/2137601 [Crossref][PubMed][Google Scholar]
5. Hamamy H. Consanguineous marriages: preconception consultation in primary health care settings. J Community Genet. 2012;3(3):185–92. doi:10.1007/s12687-011-0072-y. PMID: 22109912; PMCID: PMC3419292 [Crossref][PubMed][Google Scholar]
6. Temaj G, Nuhii N, Sayer JA. The impact of consanguinity on human health and disease with an emphasis on rare diseases. J Rare Dis. 2022;1:2. [Crossref][PubMed][Google Scholar]
7. El Shanti H, Chouchane L, Badii R, Gallouzi IE, Gasparini P. Genetic testing and genomic analysis: a debate on ethical, social and legal issues in the Arab world with a focus on Qatar. J Transl Med. 2015;13:358. doi:10.1186/s12967-015-0720-9. PMID: 26608380; PMCID: PMC4660376 [Crossref][PubMed][Google Scholar]
8. Jackson M, Marks L, May GH, Wilson JB. The genetic basis of disease. Essays Biochem. 2018;62(5):643–723. doi:10.1042/EBC20170053. PMID: 30567570; PMCID: PMC6280806 [Crossref][PubMed][Google Scholar]

Disclaimer / Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of Journals and/or the editor(s). Journals and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.