



UNDERSTANDING VAYA THROUGH MODERN AGE CLASSIFICATION: AN ANATOMICAL PERSPECTIVE ON HUMAN GROWTH, DEVELOPMENT, AND AGEING

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Abstract:

Background: Vaya is a fundamental Ayurvedic concept describing the sequential stages of human life based on growth, maturation, and ageing. This review examines these classical descriptions in the light of contemporary anatomical and developmental science.

Objective: To correlate the Ayurvedic classification of Vaya with modern age classification and interpret its anatomical significance across the human lifespan.

This review analyzes the classical descriptions of *Garbhavastha*, *Bala Vaya*, *Madhyama Vaya*, and *Vruddha Vaya* and compares them with current concepts of prenatal development, childhood, adulthood, and ageing. The study demonstrates that Ayurvedic features such as *Dhatu* maturation, *Kapha*, *Pitta*, and *Vata* predominance, and progressive changes in strength and tissue integrity closely correspond with modern anatomical, physiological, and developmental processes. Despite minor variations in age limits among different *Acharyas*, the functional characteristics of each stage show remarkable agreement with contemporary scientific knowledge. Integrating Ayurvedic principles with modern anatomy provides a comprehensive understanding of human growth, development, maturation, and senescence, highlighting the enduring scientific relevance of the concept of *Vaya*.

Keywords: Vaya, *Garbhavastha*, *Bala Vaya*, *Madhyama Vaya*, *Vruddha Vaya*
Human Growth and Development

I. INTRODUCTION

The concept of *Vaya* (age) occupies a significant place in *Ayurveda*, as it describes the progressive stages of human life characterized by distinct structural, functional, and physiological changes. Different *Acharyas*, including *Charaka*, *Sushruta*, *Vagbhata*, *Kashyapa*, and others, have classified *Vaya* in different ways based on the predominance of *Dosha*, *Dhatu* maturation, *Bala* (strength), and the natural course of growth and decline. Although these classifications differ in age limits and terminology, they share the common objective of understanding the continuous process of human development and ageing. Modern anatomy and developmental sciences similarly classify the human lifespan into successive stages such as prenatal life, infancy, childhood, adolescence, adulthood, and old age, each characterized by well-defined anatomical growth, tissue maturation, functional development, and age-related degenerative changes. Advances in embryology, growth biology, endocrinology, and gerontology have further enhanced our understanding of the structural and physiological changes that occur throughout life.

Word Derivation (*Vyutpatti*) of *Vaya*

The word *Vaya* (वयः) is a feminine noun (स्त्रीलिङ्ग शब्द). It is derived from the Sanskrit root:

वयति वेति अजायते वा।

This indicates that *Vaya* refers to the continuous progression of life with the passage of time. It signifies the state of the body that changes from birth through growth, maturity, and ageing. Thus, *Vaya* is not merely chronological age but represents the anatomical and physiological stage of an individual.

Definition of *Vaya*¹

वयस्तश्चेति कालप्रमाणविशेषापेक्षिणी हि शरीरावस्था वयोऽभिधीयते ॥ { Ca. Vi. 8/122 }

According to *Acharya Charaka*, *Vaya* is defined as the stage or condition of the body that is determined by a specific measure of time (कालप्रमाणविशेषा). In other words, it is the bodily state corresponding to a particular period of life, reflecting the sequential changes associated with growth, development, maturity, and ageing.

Vayobheda:

According to *Charaka*:² (Ca. Vi. 8/122)

वयः	Ayurvedic basis	Reason for considering
बालवयः (Birth–30 years)	अपरिपक्वधातु अजातव्यञ्जनम् सुकुमारम् अक्लेशसहम् असम्पूर्णबलम् श्लेष्मधातुप्रायम् (आषोडशवर्षम्) विवर्धमानधातुगुणम्, अनवस्थितसत्त्वम्	<i>Dhatus</i> are immature; secondary sexual characteristics are initially absent, body is delicate, strength is incomplete, and <i>Kapha</i> predominates due to active tissue formation and nourishment. Growth, maturation, and development continue until approximately 30 years.
मध्यवयः (30–60 years)	समत्वागतबलवीर्यपौरुषपराक्रमम् ग्रहणधारणस्मरणवचनविज्ञानसम्पन्नम् सर्वधातुगुणसम्पन्नम् अवस्थितसत्त्वम् अविशीर्यमाणधातुगुणम् पित्तधातुप्रायम्	Represents the period of optimum physical strength, vitality, courage, intellect, memory, speech, comprehension, and stability. All <i>dhatu</i> s remain well established, with <i>Pitta</i> predominating because

		metabolism and physiological efficiency are at their peak.
जीर्णवयः (After 60–100 years)	हीयमानधातु हीयमानेन्द्रियबलम् भ्रश्यमानधातुगुणम् वायुधातुप्रायम्	Progressive decline of <i>dhatu</i> s, sensory functions, strength, vitality, memory, speech, and cognition. <i>Vata</i> predominates, leading to degeneration and functional decline associated with ageing.

According to *Sushruta*:³ (Su. Su. 35/29)

वयः	आयुर्वेदीय अर्थः	English Meaning
बाल्यं	ऊनषोडशवर्षीया बालाः। ते त्रिविधाः— क्षीरपाः, क्षीरान्नादाः, अन्नादा इति। तेषु संवत्सरपराः क्षीरपाः, द्विसंवत्सरपराः क्षीरान्नादाः, परतोऽन्नादा इति।	Childhood extends up to 16 years of age. It is divided into three stages: <i>Kshirapa</i> (milk-fed infants, up to 1 year), <i>Kshirannada</i> (children taking both milk and solid food, up to 2 years), and <i>Annada</i> (children taking solid food, from 2 years to 16 years).
मध्यं	षोडशसप्तत्योरन्तरे मध्यं वयः। तस्य विकल्पः— वृद्धिः, यौवनं, सम्पूर्णता, परिहाणिरिति। तत्र आविंशतेर्वृद्धिः, आत्रिंशतो यौवनम्, आचत्वारिंशतः सर्वधात्विन्द्रियबलवीर्यसम्पूर्णता, अत ऊर्ध्वमीषत्परिहाणिर्यावत् सप्ततिरिति।	Middle age extends from 16 to 70 years and is divided into four phases: <i>Vruddhi</i> (growth, up to 20 years), <i>Yauvana</i> (youth, up to 30 years), <i>Samparnata</i> (complete development of all <i>Dhatu</i> s, senses, strength, and vitality, up to 40 years), and <i>Parihani</i> (gradual decline, from 40 to 70 years).
वृद्धं	सप्ततेरूर्ध्वं क्षीयमाणधात्विन्द्रियबलवीर्योत्साहमहन्यहनि वलीपलितखालित्यजुष्टं कासश्वासप्रभृतिभिरुपद्रवैरभिभूयमानं सर्वक्रियास्वसमर्थं जीर्णागारमिवाभिवृष्टमवसीदन्तं वृद्धमाचक्षते।	Old age begins after 70 years. It is characterized by progressive depletion of the <i>Dhatu</i> s, diminished sensory functions, reduced strength, vitality, and enthusiasm, appearance of wrinkles, greying and loss of hair, increased susceptibility to disorders such as cough and dyspnoea, and declining ability to perform normal activities, resembling an old house weakened by continuous rain.

According to *Asthanqa Sangraha*:⁴ (AS. Sa. 8/21-24)

Classification of Vaya	Sanskrit Description	English Meaning
बाल (Balya – Childhood) (Birth–16 years)	वयस्त्रिविधं बालं मध्यं वृद्धं च। तत्राऽऽषोडशाद्वर्षाद् बालम्॥	Vaya (age) is classified into three stages: Childhood (Balya), Middle age (Madhya), and Old age (Vruddha). Childhood extends from birth up to 16 years.
बाल उपविभागाः	तेष्वपि स्तन्याहारोभयवृत्त्या बालं त्रिविधम्।	Childhood is further divided into three stages according to diet: <i>Stanyapayi</i> (milk-fed), <i>Stanya-Anna-vrutti</i> (milk and solid food), and <i>Annada</i> (solid food).
बाल लक्षणानि	तेष्वपि स्तन्याहारोभयवृत्त्या बालं त्रिविधम्।	Childhood is further divided into three stages according to diet: <i>Stanyapayi</i> (milk-fed), <i>Stanya-Anna-vrutti</i> (milk and solid food), and <i>Annada</i> (solid food).
बाल लक्षणानि	तस्मिन् देहप्रमाणवृद्धिः श्लेष्मोद्रेकश्च। तेन बालस्य स्नेहमार्दवसुकुमार्यल्पक्रोधत्वानि भाग्यानि भवन्ति॥	Childhood is characterized by continuous increase in body size and growth with predominance of <i>Kapha Dosha</i> . Hence, children possess softness, unctuousness, tenderness, delicacy, and are generally calm with less anger.
मध्य (Madhya – Middle Age) (16–60 years)	आषष्टैर्मध्यम्॥	Middle age extends from 16 to 60 years.
मध्य उपविभागाः	मध्यमपि त्रिविधं यौवनं सम्पूर्णत्वमपरिहानिश्च॥	Middle age is divided into three phases: <i>Yauvana</i> (Youth), <i>Sampurnatva</i> (Complete maturity), and <i>Aparihani</i> (Maintenance without decline).
यौवनम्	तत्राऽऽत्रिंशतो यौवनम्॥	Youth continues up to 30 years and is marked by vigor, enthusiasm, and active growth.
सम्पूर्णत्वम्	आचत्वारिंशतः सर्वधात्विन्द्रियबलवीर्यपुरुषस्मरणवचनविज्ञानप्रश्रयगुणसम्पूर्णत्वम्॥	Up to 40 years, all body tissues, sense organs, strength, vitality, memory, speech, intellect, and other qualities attain complete development and perfection.
अपरिहानिः	अतः परमपरिहानिः॥	After 40 years and up to 60 years, the body maintains its fully developed state without significant physiological decline.

मध्य – दोषप्राधान्यम्	तस्मिन् पित्तोद्रेकः। तेन दीप्ताग्नितापप्रज्ञाधिक्यापरिपाकव्यव सायश्च ॥	<i>Pitta predominates during middle age, resulting in strong digestion, body heat, sharp intellect, maturity, courage, and efficient work capacity.</i>
वृद्ध (<i>Vruddha</i> – Old Age) (Above 60 years)	ततो वृद्धम् ॥	Old age begins after 60 years.
वृद्ध – लक्षणानि	वृद्धं तु शनैः शनैः क्षीयमाणधात्विन्द्रियादिगुणं वलीखलितकासश्वासाग्निसादादिभिर भिभूयमानं जीर्णं भवनमिवाभिवृष्टमवसीदति	Old age is characterized by gradual decline of body tissues, sensory functions, and physical strength. Wrinkles, greying of hair, cough, breathlessness, and diminished digestive power become evident, resembling the gradual deterioration of an old house.
वृद्ध – दोषप्राधान्यम्	तस्मिन् मारुतोद्रेकः। तेन श्लथसारमांससन्ध्यस्थिता त्वक्पारुष्यमवनामः कायस्य वेपथुः कासः श्वासः श्लेष्मसिङ्घाणकोदीरणं धातुक्षयश्च ॥	<i>Vata Dosha predominates in old age, leading to muscle wasting, joint laxity, rough skin, stooped posture, tremors, cough, dyspnoea, increased nasal and phlegm discharge, and progressive depletion of body tissues.</i>
दशकानुसारं गुणक्षयः	बाल्यं वृद्धिः प्रभा मेधा त्वक्शुक्राक्षिश्रुतीन्द्रियम्। दशकेषु क्रमाद्वेति मनः सर्वेन्द्रियाणि च ॥	With each successive decade of life, there is a gradual decline in growth, complexion, intellect, skin quality, reproductive capacity, vision, hearing, mental faculties, and finally all sensory functions.

According to Ashtanga Hrudaya:⁵ (AH.Sa. 3/105)

वयः भेदः	Ayurvedic description	English Description
बालवयः Birth to 16 years	बालवयःवयस्त्वाषोडशाद्वालं तत्र धात्विन्द्रियौजसां वृद्धिः।	Childhood (<i>Bala Vaya</i>): This stage extends up to 16 years of age. During this period, the <i>Dhatus</i> (body tissues), <i>Indriyas</i> (sense organs), and <i>Ojas</i> (vital essence) undergo continuous growth and development. Physical, mental, and functional maturation progressively occur, making this the period of active growth.
मध्यवयः 16–70 years	मध्यवयःआसप्ततेर्मध्यं तत्रावृद्धिः।	Middle age (<i>Madhya Vaya</i>): This stage extends from 16 to 70 years. The body attains maturity, and the <i>Dhatus</i> , <i>Indriyas</i> , and <i>Ojas</i> remain relatively stable. Growth ceases,

		strength, vitality, and functional capacity are maintained, representing the peak period of life.
वृद्धवयः After 70 years	वृद्धवयःपरं क्षयः।	Old age (<i>Vruddha Vaya</i>): After 70 years, degenerative changes predominate. There is gradual decline (<i>Kshaya</i>) of the <i>Dhatus</i> , <i>Indriyas</i> , <i>Bala</i> (strength), and <i>Ojas</i> , resulting in reduced physical strength, sensory efficiency, and physiological functions.

According to Kashyapa:⁶ (Ka. Ki. 3/72-74)

Vaya Bheda (Age Group)	Ayurvedic Description	English Meaning
गर्भावस्था	गर्भ	The intrauterine period, from conception until birth.
बालावस्था	वर्षावरः क्षीरपः स्याद् यावत् पिबति वा पयः। वयस्तद्बालमस्माच्च यावत् षोडशवार्षिकः॥	Childhood extends from birth up to 16 years. During infancy, the child is <i>Kshirapa</i> (milk-fed) until one year of age or as long as milk remains the principal food.
कुमारावस्था	अन्नादः सर्व एव स्यात् कौमारे वयसि स्थितः॥	The child becomes <i>Annada</i> (consuming solid food) and remains in the <i>Kumara</i> stage until the completion of 16 years.
यौवनावस्था	अतः परं धातुसत्त्वबलवीर्यपराक्रमैः। वर्धमानैश्चतुस्त्रिंशद्युवा वर्षाण्युदकतः॥	From 16 to 34 years, the individual is in the stage of <i>Yauvana</i> , characterized by progressive increase in tissue development, mental strength, physical strength, vitality, and courage.
मध्यावस्था	धात्वादिभिः स्थिरीभूतैर्यावदासप्ततिर्नरः॥	From 34 to 70 years, all bodily tissues, strength, vitality, and mental faculties remain relatively stable. This is the middle age.
वृद्धावस्था	मध्यो धात्वादिभिः पश्चात् क्षीयमाणैर्यथाक्रमम्। वृद्धो भवति मन्दात्मा प्रवृत्तिर्यावदायुषः॥	After 70 years, gradual decline of tissues, strength, vitality, and mental functions occurs. This is old age, continuing until the end of life.

According to Modern Science;⁷

Stages of Life	Duration	Growth and Development (Gray's Anatomy)
Prenatal Period	Fertilization to Birth	Human prenatal development is divided into two major phases: the embryonic period and the fetal period. Development proceeds through coordinated growth, differentiation, and maturation of all organ systems.
Embryonic Period	0–8 weeks (0–56 days)	The embryonic period is the most critical phase of organogenesis. During this time, the embryo passes through 23 Carnegie stages, classified according to internal and external morphological features rather than age or size. Rapid cell differentiation establishes the body plan and all major organ systems. Limb buds, pharyngeal arches, eyes, ears, and the neural tube develop sequentially. By the end of the eighth week, the embryo exhibits distinct human characteristics, with separated fingers and toes, developing eyelids, and well-formed external genitalia (although sex determination is not yet reliable). The embryo measures approximately 30 mm and weighs 2–3 g.
Fetal Period	9 weeks to Birth	The fetal period is characterized predominantly by rapid growth, maturation, and functional development of organs already formed during embryogenesis. Although differentiation continues, the emphasis shifts toward enlargement and refinement of tissues and organs. Bone marrow becomes the principal site of hematopoiesis, body proportions become more balanced, and organ systems progressively attain functional maturity. By term, the fetus measures approximately 500 mm (50 cm) in length and weighs more than 3000 g.
Neonate (Early Neonatal Period)	Birth to 7 days	Rapid adaptation from intrauterine to extrauterine life. Establishment of respiration, circulation, thermoregulation, and feeding. Physiological loss of approximately 10% of birth weight due to reduction of extracellular fluid. Organ systems begin functional maturation.
Neonate (Late Neonatal Period)	7–28 days	Continued maturation of body systems, improved feeding and weight gain, adaptation of gastrointestinal and immune systems, increasing neuromuscular coordination, and progressive physiological stability.
Infancy	1 month to 1 year	Period of the most rapid postnatal growth. Birth weight doubles by about 5 months and

		triples by 12 months. Body length increases by approximately 50% during the first year. Total body water decreases from about 75–80% at birth to around 60% by one year. Rapid brain growth, motor development, sensory maturation, and eruption of primary teeth occur. Nutrition and hormonal balance (especially insulin and IGF-I) play a critical role in normal growth and metabolic programming.
Early Childhood	1–5 years	Growth rate becomes slower but remains steady. Progressive increase in height and weight, maturation of musculoskeletal system, improved locomotion, language acquisition, cognitive development, and refinement of fine and gross motor skills.
Late Childhood	6 years to onset of puberty	Steady somatic growth with gradual increase in bone length and muscle mass. Permanent teeth replace deciduous teeth. Continued maturation of the nervous, endocrine, cardiovascular, and immune systems. Marked cognitive, behavioural, and social development prepares the child for adolescence.
Early Adolescence (Growth Spurt Begins)	Girls: 10.5–11 years Boys: 12.5–13 years	Marked acceleration in height (adolescent growth spurt) lasting about 2–2.5 years. Initiation of puberty, rapid skeletal growth, endocrine activation, and development of secondary sexual characteristics.
Peak Adolescent Growth	Girls: Peak at ~12 years Boys: Peak at ~14 years	Girls: Gain ≈ 16 cm in height. Boys: Gain ≈ 20 cm (mainly trunk growth); peak growth velocity may reach 10 cm/year. Rapid musculoskeletal growth, maturation of reproductive organs, changes in body proportions, and increasing muscle mass (especially in boys).
Late Adolescence	Girls: 15–18 years Boys: 16–20 years	Growth velocity gradually declines; body weight continues to increase after maximum height velocity. Completion of sexual maturation, attainment of near-adult body proportions, continued bone mineralization and muscular development.
Young Adulthood (Attainment of Adult Height)	Females: ~ 18 years Males: ~ 20 years (average completion: females 16.25 ± 2 years; males 17.75 ± 2 years)	Longitudinal growth ceases as epiphyseal growth plates fuse. Only minimal increase in stature may occur due to vertebral appositional growth.

		Adult stature achieved, complete skeletal maturity, peak physical performance, and fully mature reproductive function.
Middle Adulthood	After ~40 years	Height remains relatively stable initially, followed by gradual reduction with advancing age. Degenerative changes begin; intervertebral disc thinning and vertebral changes contribute to gradual loss of height.
Older Age (Early Old Age)	60–74 years	Progressive reduction in skeletal muscle mass and strength (sarcopenia), decline in bone mineral density (osteopenia), thinning of skin with reduced collagen and elasticity, graying of hair, decreased visual accommodation (presbyopia) and hearing (presbycusis), and gradual reduction in cardiovascular and respiratory reserve.
Advanced Old Age	75–89 years	More pronounced sarcopenia and osteoporosis, degeneration of articular cartilage with reduced joint mobility, slower nerve conduction, decline in balance and coordination, reduced pulmonary function, decreased cardiac reserve, and slower tissue repair and wound healing.
Longevity (Very Old Age)	≥90 years	Advanced multisystem ageing with frailty, marked loss of muscle and bone mass, cerebral atrophy with variable cognitive decline, reduced renal and hepatic function, impaired immune response (immunosenescence), decreased regenerative capacity, and increased susceptibility to infections, falls, fractures, and chronic diseases.

DISCUSSION:

Bala Vaya represents the period of active growth, development, and maturation of the human body, during which the *Dhatus*, *Indriyas*, and *Ojas* undergo continuous development. Although different *Acharyas* have proposed varying age limits for *Bala Vaya*, they uniformly describe this stage as one of immature tissues (*Aparipakva Dhatu*), incomplete strength (*Asampurna Bala*), delicacy (*Sukumara*), *Kapha* predominance (*Shleshma-dhatu-praya*), and progressive tissue maturation (*Vivardhamana Dhatu-guna*). These descriptions closely correspond with modern anatomical concepts described in Gray's Anatomy, where childhood encompasses the neonatal period, infancy, early childhood, late childhood, and adolescence, each characterized by distinct patterns of structural and functional development. During the neonatal period, the newborn undergoes rapid adaptation to extrauterine life through establishment of respiration, circulation, thermoregulation, and feeding, while infancy is marked by the most rapid postnatal growth, with birth weight doubling by five months and tripling by one year, accompanied by rapid brain development and neuromuscular maturation. Growth continues steadily throughout early and late childhood with progressive skeletal growth, muscular development, maturation of the nervous, endocrine, cardiovascular, immune, and reproductive systems, and

acquisition of cognitive, behavioural, and social skills. *Kashyapa's* subdivision of childhood into *Kshirapa*, *Kshirannada*, and *Annada* according to dietary transition remarkably parallels modern pediatric nutritional stages of exclusive breastfeeding, complementary feeding, and complete solid food intake. The *Ayurvedic* predominance of *Kapha Dosha* during *Bala Vaya* also reflects the anabolic state of childhood, which modern physiology attributes to the coordinated actions of growth hormone, insulin-like growth factor-1 (IGF-1), insulin, thyroid hormones, and adequate nutrition that promote tissue growth and organ maturation. While *Ashtanga Hrudaya* considers *Bala Vaya* to extend up to sixteen years, *Sushruta* emphasizes that complete maturation of body tissues continues until approximately thirty years of age, which aligns with modern evidence that skeletal maturation, peak bone mass, muscle strength, and full physiological maturity are attained during early adulthood. Thus, the classical *Ayurvedic* understanding of *Bala Vaya* demonstrates remarkable agreement with modern concepts of human growth and development, highlighting that childhood is a dynamic phase of continuous anatomical, physiological, and functional maturation. *Kashyapa* recognizes *Garbhavastha* (गर्भावस्था) as the earliest stage of life, encompassing the period from conception until birth, during which the fetus develops within the uterus. This concept closely corresponds to the modern prenatal period, which is divided into the embryonic phase (0–8 weeks), characterized by organogenesis and establishment of the body plan, and the fetal phase (9 weeks to birth), marked by rapid growth, structural maturation, and functional development of organ systems. Thus, the *Ayurvedic* description of *Garbha* is consistent with the modern understanding that prenatal life is a continuous, highly coordinated process of growth, differentiation, and maturation culminating in the birth of a fully developed newborn.

Madhyama Vaya is regarded in *Ayurveda* as the period of maximum structural and functional maturity, although its age limits vary among different *Acharyas*, ranging from 16–60 years, 16–70 years, or approximately 30–60 years. This stage is characterized by complete development and stability of the *Dhatus*, *Indriyas*, *Bala*, *Virya*, *Ojas*, memory, intellect, speech, courage, and mental steadiness, with *Pitta Dosha* predominating because of its association with efficient metabolism, strong digestive power, sharp intellect, and active physiological functions. Some classical texts further subdivide *Madhyama Vaya* into *Vruddhi* (continued growth), *Yauvana* (youth), *Sampurnata* (complete maturity), and *Aparihani* or *Parihani* (maintenance with the beginning of gradual decline), indicating the transition from active growth to peak maturity and finally to the earliest phase of ageing. These *Ayurvedic* concepts closely correspond with modern anatomical descriptions of growth and development. According to Gray's Anatomy, adolescence is marked by a rapid growth spurt initiated by endocrine changes, with peak height velocity occurring around 12 years in girls and 14 years in boys. Longitudinal skeletal growth is completed by approximately 18 years in females and 20 years in males following epiphyseal fusion, resulting in attainment of adult stature and complete skeletal maturity. Early adulthood represents the period of maximum physical performance, reproductive capacity, musculoskeletal strength, and optimal physiological efficiency, closely resembling the *Ayurvedic* concept of *Sampurnata*. Thereafter, from about 40 years onward, subtle age-related changes gradually begin, including reduced growth potential, progressive decline in tissue regenerative capacity, intervertebral disc thinning, and minimal reduction in stature, while overall functional capacity remains largely preserved during middle adulthood. Thus, the *Ayurvedic* description of *Madhyama Vaya* remarkably parallels modern anatomical concepts by identifying it as the stage of peak structural integrity, physiological efficiency, metabolic activity, and gradual transition towards ageing.

Vruddha Vaya represents the stage of life in which degenerative changes gradually predominate over growth and tissue maintenance. Classical *Ayurvedic* texts describe this period as being marked by *Kṣaya* (progressive depletion) of the *Dhatus*, *Indriyas*, *Bala*, *Virya*, and *Utsaha*, with *Vata Dosha* becoming predominant, resulting in wrinkles (*Vali*), greying and loss of hair (*Palita*, *Khalitya*), diminished strength, impaired sensory functions, reduced memory and cognition, cough, dyspnoea, and declining capacity to perform daily activities. This description closely corresponds with the modern biological concept of ageing, which is characterized by progressive structural and functional deterioration across

multiple organ systems. Ageing is associated with sarcopenia (loss of skeletal muscle mass and strength), osteopenia and osteoporosis, thinning of the skin due to reduced collagen and elastin, presbyopia, presbycusis, reduced cardiovascular and pulmonary reserve, slower nerve conduction, decreased renal and hepatic function, immunosenescence, impaired tissue repair, and increased susceptibility to chronic diseases, falls, fractures, and frailty. The gradual decline in physical performance, sensory efficiency, cognitive function, and physiological reserve described in geriatric medicine provides strong anatomical and physiological support for the *Ayurvedic* concept of *Dhatu Kshaya* and *Vata* predominance during old age. Thus, the classical description of *Vruddha Vaya* is remarkably consistent with current scientific understanding of human ageing, highlighting a progressive, multisystem decline in structure and function that ultimately reduces the body's adaptive capacity and overall quality of life.

CONCLUSION:

The concept of *Vaya* in *Ayurveda* provides a comprehensive biological framework for understanding the continuum of human life from conception to old age. Although classical *Acharyas* differ slightly in the chronological limits of each stage, they consistently describe age in terms of the structural and functional status of the body rather than chronological years alone. The present review demonstrates that these classical descriptions closely parallel modern anatomical and developmental science. *Garbhavastha* corresponds to prenatal growth and organogenesis; *Bala Vaya* reflects the dynamic period of growth, tissue maturation, and functional development; *Madhyama Vaya* represents the attainment and maintenance of peak anatomical integrity, physiological efficiency, and reproductive maturity; while *Vruddha Vaya* signifies the gradual predominance of degenerative changes associated with biological ageing. Thus, the *Ayurvedic* classification of *Vaya* is not merely an age-based division but a scientifically meaningful description of the sequential processes of human growth, development, maturation, and senescence. Integrating these classical concepts with contemporary anatomical knowledge provides a holistic and evidence-based understanding of the human lifespan, reinforcing the enduring scientific relevance of *Ayurvedic* principles in modern anatomical and developmental sciences.

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