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## **Kundalini, A Scientific Approach Towards Consciousness: A Bliss**

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*Abstract: Indian religious texts, Ayurveda and Yoga always offer clues for new researches, only need of understanding and beliefs are necessitated. Human body is composed of different forms of potential, kinetic, chemical energies etc. Understanding of these energies and controlled uses with full understanding give immense power to utilize them. Kundalini is an approach with similar aspects of understanding where first nerves around different Yogic chakras are brought in system to release specific information in controlled way and, thereafter, bodily energies are brought in equilibrium with universal or other surrounding energies. Meditation is only medium with proper guidance to achieve the real awakening or consciousness.*

Keywords: Ayurveda, Yoga, Kundalini, Yogic Chakras, Energy, Consciousness.....

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Energy is basis of the life and functioning of every cells needs energy and they store it smartly by converting in to energy-rich molecules such as ATP and NADH to utilize for metabolism and various other functions. Even living organisms (including human beings) are constantly involved in accumulating and transforming energies by various sources to maintain their life-cycle and for any work to be done. It is essential for maintaining homeostasis<sup>4</sup> and measuring the work potential. Prek. et. al. (2008) mentioned metabolism as a process to convert energy in necessary forms by calculating the energy input and energy output in thermoregulatory system<sup>5</sup>.

In all these transformations, utilization and storage of energies, brain plays an important role as controlling instrument. Specialized neurons of hypothalamus and brainstem stores the information of these energies<sup>6</sup>. Information is carried out by neurons in forms of impulses through ion channels. These channels use energy to build and maintain a concentration gradient of ions between the extracellular fluid and the cell's cytosol<sup>7</sup> and their communication is either local (to neighboring cells) or of long-distance communication to cells of different parts of the body<sup>8</sup>. Bundles of neurons work as carrier and they constitute nerves. These nerves may be cranial or spinal nerves based on origin<sup>10</sup>. 31 pairs of spinal nerves are present in spinal cord and, therefore, the spinal cord becomes main pathway for information connecting the brain and peripheral nervous system. They bring all information including desire, pleasure, emotion etc. Veda shows the path of consciousness by controlling the mind and desires using Yogic sadhana as combination of mind, soul and body constitute the substratum for life and this is basis of purusa, for him *Veda* is guiding force for light<sup>1</sup>.

Indian philosophy believes the abode of god within the body, but for recognition of god within body, consciousness is only medium. Such consciousness is achieved through balancing the bodily energy through yogic-performances of *Kundalini Sadhana*. It is process of upbringing the body's own forces or energy collected in central column. Rigveda refers it as raising the water from the bottom of the well<sup>3</sup>. Water is symbolic representation of energy and that energy is stored in bottom of spine i.e., *Muladhara*. It is suggested to channelize that energy upward. Such ascent is from chakra to chakra progressively increasing the psychic forces existing with cerebro-spinal axis.

### **Anatomy and Physiology of Kundalini**

The word *Kundalini* is derived from 'Kundalin' which means coiled serpent<sup>12</sup>. Shabdakalpdrum mentions its place in *Muladhara*, sitting in coiled form like serpent and its light goes to universe while it is present in body<sup>13</sup>.

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Rigveda (1.89.10) refers the dwelling of *Adishakti*, a source of primal light in *Muladhara*. Primal light for three cosmic qualities viz., sattva, rajas and tamas. Primal light which leads to *Shiva* and *Shiva* is truth. Kundalini helps in self-identification and self-connection with *Shiva*<sup>14</sup>. *Shiva* is egoless.

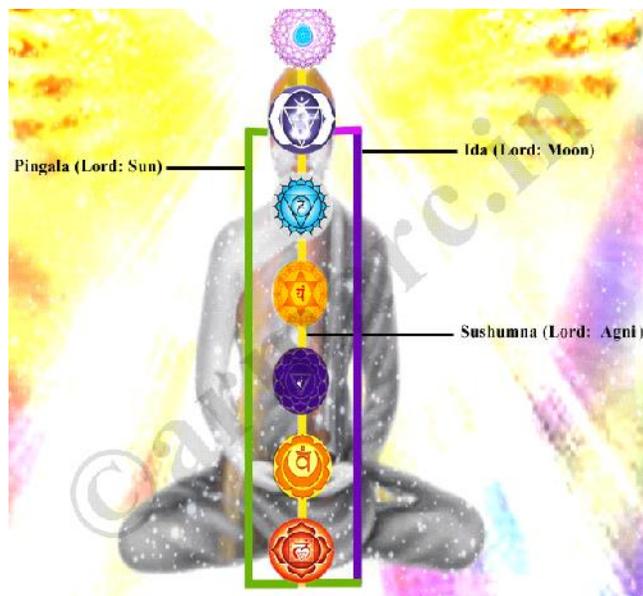
Ego is biggest hindrance of any success. Individuals' limited personality is after the ego. The self-identification due to ego runs after three layers as<sup>15</sup>:

1. Three qualities (Sattva, Rajas and Tamas): They control mind including attitude and govern us to move towards any specific purpose.
2. Shada rasas (Six tastes viz., Sweet, Sour, Salty, Bitter, Pungent and Astringent): They controls internal chemistry and links mind and body.
3. Panchmahabhuta (Prithvi, Jala, Agni, Aakash and Vayu): They provides physical appearance including our body's shape and everything around.

Ego is part of this microcosm (physical body), but when this microcosm is linked with macrocosm (universe), ego and self automatically becomes non-valuable. Yoga is instrumental in this. Awakening of *Kundalini* helps in establishing such links. Once such links are assured, volitional control of motor functioning of spinal nerves starts, however this is advanced stage of *Kundalini* awakening. Prana vayu plays important role in these. Yoga Chudamani Upanishada Shloka number 30 mentions Prana pulls Apana vayu and Apana pulls Prana vayu. Awakening of *Kundalini* makes a person with such ability. In Shloka numbers 37-38, eight studded forms of *Kundalini* are hinted and energy generated with awakening moves through *Sushumna* to avoid deleterious effects on other system<sup>16</sup>. Out of 72,000 mentioned in Dhyana Bindu Upanishada, 10 are said to be important to carry Prana viz., Ida, Pingala, Sushumna, Gandhari, Hastijhva, Pusha, Yasasvini, Alambusa, Kuhuh and Sankhini. Out of these ten, Ida, Pingala and Sushumna always carries Prana, their lords respectively being moon, sun and agni. Ida lies in left and Pingala lies in right while Sushumna in middle. Prana consists of ten vayu. Prana, Apana, Samana, Udana and Vyana belongs to Prana while Naga, Kurma, Krkara, Devadatta and Dhananjaya are Sub-pranas<sup>17</sup>. In awakened, Prana vayu from Ida and Pingala starts to flow through central channel of *Sushumna* passing through various chakras (Yogic centers) and they meet again at Agya chakra. This gives spiritual control over Prana vayu (Figure Number: 1). Every Yogic center (chakra) has its own control over various Karmendriya (organs of action), Gyanendriya (organs of knowledge), Mantras etc.

**Figure Number: 1**

**Position of Ida, Pingala and Sushumna Nadi Around Chakra**



## Chakras and their descriptions

**Muladhara Chakra:** This is base of *Kundalini*, also known as *Kundalini Adishakti*, which is sitting around a hidden *Shivalinga*. The details of *Muladhara* are as:

Position	: Base of Spine, coccygeal
Beeja Mantra	: Lum
Floral leaves	: Four
Colour of floral leaves	: Red
Tatva (element)	: Bhoomi (earth)
Quality	: Smell
Vayu	: Apana
Gyanendriya	: Nose
Karmendriya	: Anus
Planet	: Mars
Effects	: Creative works and fearless
Benefits from Siddhi	: Health, knowledge of earthy elements, powers of gaining



**Swadhsthana Chakra:** This chakra is related with anxiety and arousals. Awakening of this chakra is only possible after controlling over desire of meal, sleep, sex etc. The details of this chakra are as:

Position	: Above <i>Muladhara</i> , sacral
Beeja Mantra	: Vum
Floral leaves	: Six
Colour of floral leaves	: Sindoori (orange-red)
Tatva (element)	: Jala
Quality	: Taste
Vayu	: Apana
Gyanendriya	: Tongue
Karmendriya	: Reproductive organs
Planet	: Moon/Mercury
Effects	: Knowledge, struggle, sexual activities
Benefits from Siddhi	: Creation, intelligence, knowledge, egoless, nurture



**Manipura Chakra:** This is basis of sleep, physical desires, fear, betrayal, self, jealousy etc. Meditation of over this chakra gives control of them. Deails of this chakra are as:

Position	: Navel root, lumbar
Beeja Mantra	: Ram
Floral Leaves	: Ten
Colour of floral leaves	: Blue
Tatva (element)	: Agni
Quality	: Vision
Vayu	: Samana
Gyanendriya	: Eyes



Karmendriya	: Hands and legs
Planet	: Sun
Effects	: Win, ego
Benefits from Siddhi	: Creation and destruction and knowledge

**Anahata Chakra:** This is abode of soul. Ego, expectations, suspicions, pride etc. Control of these may bring awakening of this chakra. Details of this chakra are as:

Position	: Heart, thoracic
Beeja Mantra	: Yum
Floral leaves	: Twelve
Colour of floral leaves	: Arun (reddish glow of rising sun)
Tatva (element)	: Vayu
Quality	: Touch
Vayu	: Prana, vyana, samana, apana and udana
Gyanendriya	: Skin
Karmendriya	: Hands
Planet	: Jupiter and moon
Effects	: Yoga
Benefits from Siddhi	: Power of winning over everything



**Visuddha Chakra:** This is present at top of spinal cord and is related with forgiveness, kindness, self-control, purity etc. Control over this chakra gives purity. Details are of this chakra are as:

Position	: Neck, cervical
Beeja Mantra	: Hum
Floral leaves	: Sixteen
Colour of floral leaves	: Smoky
Tatva (element)	: Akasa
Quality	: Colour
Vayu	: Prana
Gyanendriya	: Ear
Karmendriya	: Vocal related
Planet	: Venus
Effects	: Saint (calm)
Benefits from Siddhi	: Calm mind, spiritual ability to see beyond time



**Aagya Chakra:** This chakra is related with third eye of lord *Shiva*. It is directly related with calmness of mind and excellence of performances. This is situated near to hypothalamus and brainstem. Details of this chakra are as:

Position	: Inside in between two eyebrows
Beeja Mantra	: Aum
Floral leaves	: Two
Colour of floral leaves	: White
Tatva (element)	: Significant

Quality	: Knowledge
Vayu	: Udana
Gyanendriya	: Root of palate
Karmendriya	: Amritapana (Getting elixir)
Planet	: Sun, moon and all lokas
Effects	: King
Benefits from Siddhi	: Able to do everything, conscious samadhi



**Sahasrara Chakra:** This chakra is positioned at top of all chakras. This is related with pure conciousness. This is referred to unification of soul with lord *Shiva*. This is positioned at top of cerebrum covering all segments.

Position	: Top of cerebral hemisphere
Beeja Mantra	: Visarga (ah)
Floral leaves	: Sahasrara
Colour of floral leaves	: Divine light
Tatva (element)	: All tatva
Quality	: Conscious
Vayu	: Udana
Gyanendriya	: Brain
Karmendriya	: Awakening (consciousness) or samadhi gyan
Planet	: Shani
Effects	: Yogiraj
Benefits from Siddhi	: Infinite siddhis, salvation

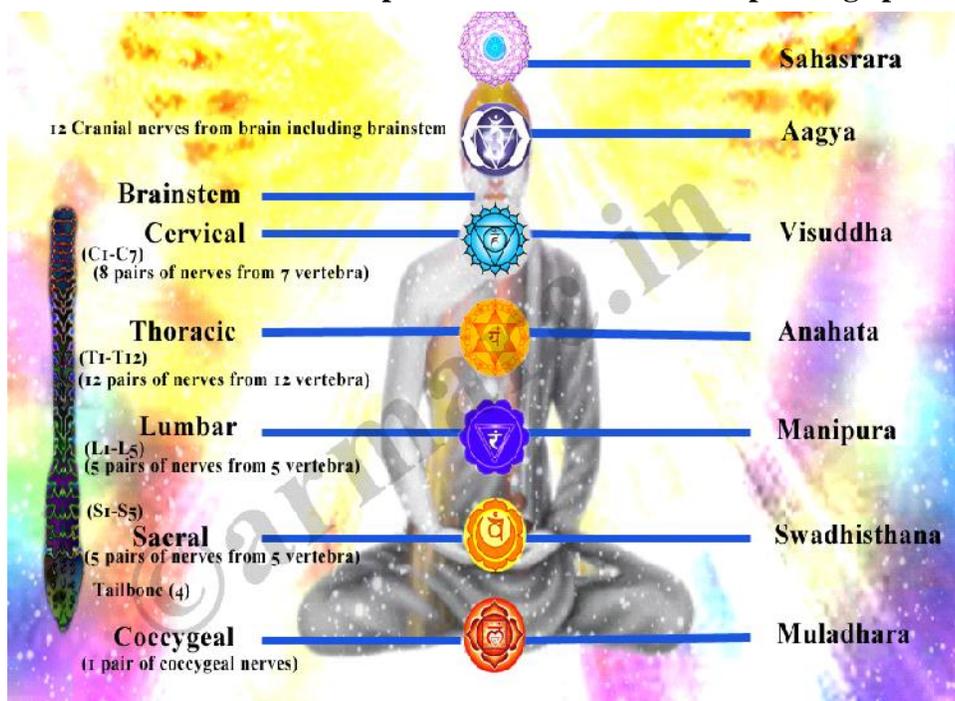


**Chakras, their corresponding nerves and motor functions**

Diagrammatical position of nerves in relation to Chakras are presented in figure number:2.

**Figure Number: 2**

**Position of Different Charkras in Spinal Cord And Their Corrsponding Spinal Nerves**



(Continued to next edition.....)

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(Continued from previous edition.....)

**Chakras, their corresponding nerves and motor functions**

All chakras are related to different types of nerves based on positions mentioned in spinal cord, brainstem and cortex portions. Five chakras are located in spinal cord and spinal nerves are present in spinal cord. The dorsal sensory root of spinal cord carries sensory impulses while ventral motor root responses to those sensory impulses<sup>18</sup>. Motor impulses are matter of more concerns for awakened Kundalini as control of response is involved.

*Muladhara Chakra* is present in coccygeal portion consisting of a pair nerve. Coccygeal nerve arises from conus medullaris and helps to form coccygeal plexus with S<sub>4</sub> and S<sub>5</sub> of sacral origin. Anococcygeal nerves arise from this plexus and innervate to tailbone and around the anus<sup>19</sup>. Coccygeal plexus leads to pudendal nerve<sup>20,21</sup>. Pudendal nerve is main nerve of perineum with motor function of various pelvic muscles including external urethral sphincter and external anal sphincter<sup>21</sup>. By this way, *Muladhara* controls over excretory and sexual functions.

*Swadhisthana Chakra* is positioned above *Muladhara* in sacral region. S<sub>1</sub>-S<sub>3</sub> form sacral plexus with contribution from L<sub>4</sub> and S<sub>4</sub>. Branches of this plexus innervate to gluteal muscle and muscles related to pelvic functioning reaching to perineum and posterior surface of thigh<sup>19</sup>. Sciatic nerve is the main nerve of this plexus. This is longest nerve of human body giving motor innervation of the muscles of the foot, leg and thigh<sup>22,23</sup>. They also provide partial stimulation to uterus, fallopian tubes, bladder and prostate<sup>23</sup>.

*Manipura Chakra* is positioned in neural root or lumbar region. Lumbar region is having 5 pairs of nerves. The branches of first lumbar nerve are iliohypogastric, ilioinguinal and genitofemoral. Iliohypogastric and ilioinguinal nerve are important to the abdomen muscle. Ilioinguinal nerve is also related with genitalia of both male and female. L<sub>2</sub>-L<sub>5</sub> leads to femoral nerve associated with genitalia, leg, thigh, hamstring and toes<sup>24</sup>.

*Anahata Chakra* is placed in thoracic region of spinal cord near to heart. The first two thoracic nerves extend to shoulder and arms. Next four nerves direct signals to chest. The lower five thoracic nerves continue to chest and abdomen and the last one leads to abdominal wall and buttock<sup>25</sup>.

*Visuddha Chakra* occupies the cervical area near the neck. Cervical region is related with 8 nerves. The first 3 cervical nerves (C<sub>1</sub>-C<sub>3</sub>) control the head and neck while C<sub>4</sub> controls shoulder and diaphragm. C<sub>5</sub> is related deltoid muscle and bicep muscles. Wrist extensors and some portions of biceps are innervated by C<sub>6</sub>, C<sub>7</sub> and C<sub>8</sub> nerves are respectively related with triceps and hands<sup>26</sup>.

*Agya Chakra* occupies the position between two eyebrows in brainstem area. Brainstem is posterior part of brain in continuation to spinal cord comprising of midbrain, pons and medulla oblongata. Out of 12 pairs of cranial nerves, 10 pairs numbering III-XII come out from this area<sup>27</sup>. Control of cardiovascular system, respiratory system, pain sensitivity, alertness, awareness etc. are related with brainstem<sup>28</sup>.

*Sahasrara Chakra* is placed at top of cerebral hemisphere or better to say covering telencephalon and diencephalon portion of brain. This portion controls movement, olfaction, language, communication, learning, memory, hearing, emotions, endocrine systems, consciousness etc.<sup>29,30</sup>

**Discussion:** Awakening of *Kundalini* is only possible by continuous Yoga and meditation with grace of god. Because even after years of involvement in this, only few practitioners get the success. *Saraswat Kundalini Mahayoga*

clearly refers energy in relation to *Maa Shakti* and mentions once awakened it crosses all obstructions to reach to universe (*Shiva*) through *Sahasrara Chakra*. A person can remove the obstruction by *Pranayama* as it cleanses .....<sup>31</sup>. *Sushumna* nadi plays important role in this. *Sushumna* nadi is further divided in to three parts viz., *Vajra*, *Chitrini* and *Brahma*. In this *Brahma* is in core surrounded by *Chitrini* and *Chitrini* is surrounded by *Vajra*<sup>33</sup>.

Rigveda 10/125:6-8 associates *Kundalini Shakti* with *Vaka Para Shakti*. It further endorses that powers of will, action, mantras and self are due to this *Para Shakti*. *Kula Kundalini*, *Bhujangini*, *Sarpini*, *Muladhara Niwasini*, *Valayakaara Sarpini*, *Vidyut*, *Muktashakti*, *Mahadevi*, *Saptachakra bhedini*, *Vishwashakti*. *Aprajita* etc. are various names given for *Kundalini*. These all names relate to movement or energy or hidden knowledge.

The beeja mantra of *Muladhara Chakra* 'Lam' is pertaining to 'prithvibeeja'<sup>32</sup>, means related with earthy elements. It is ruled by *Prithvi* mahabhuta. Earth is foundation of everything. Mars is planet of this chakra which is regarded for bravery. Control over excretory and sexual functioning leads to freedom from urges, which are weakness of human beings. Once all weakness suggested in shastras are removed, then only internal power of energy flowing inside the body can be understood.

'Vam' is beejamantra of swadhisthana. It is said to be *Varunabeeja* mantra. *Varuna* is related with water. 'Vam' is also called as *Pracheta* what brings chetana or feeling or consciousness. This is ruled by *Jala* mahabhuta<sup>34</sup>. It helps in creative flow of energy or energy flow is first registered here. This *Chakra* is connected with control over desires or emotions. Once such control is done, then only egoless creation starts. Moon and mercury are related planets which controls emotional aspects of brain and intelligence as nourishment of brain is linked to *Jala* mahabhuta.

The beejamantra of *Manipura Chakra* is 'Ram' which is related to fire, which has power of creation and destruction. It means who knows the mind<sup>35</sup>. Creation and destruction is common part of metabolic process which happens to body to provide nourishment. Agni is related with absorption and excretion. Accordingly, functions of nerves of this region are adjudged.

'Yum' is beejamantra of *Anahata Chakra*. It means moving around<sup>36</sup>. It is related with *Vayu* mahabhuta. The power of movement gives the winning over everything as control over this provides control over heart and abdomen.

*Visuddha Chakra* is awakened by 'Hum' beejamantra which means sky<sup>37</sup>. It is linked to *Aakash* mahabhuta which is responsible for actions viz., expansion, vibration, non-resistance etc. It is immeasurable. Nerves related to this area also covers shoulder, diaphragm etc. or muscles controlling the breathing, sound-waves etc. As waves are present always in this universe, so it is connected to see beyond time.

*Aagya Chakra* is having 'Aum' as beejamantra. 'Aum' is said to be infinite, encompassing the whole universe. It is finest essence and cause of everything<sup>38</sup>. 10 cranial nerves are controlled by this area which controls the systems like cardiovascular, respiratory etc. This is responsible for awareness, so conscious samadhi is associated with this area.

*Sahasrara Chakra* is related with silence or 'Om' or 'Ah'. This is about the feeling of insignificance leading to strong attachment with god. This is door to release our own energy in universe to be *Lord Shiva*. This is ultimate part of all chakras. This is about direct connection things which are present in universe, but cannot be seen by human beings or instruments even.

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Hence, it can be apprehended that *Kundalini* is completely a scientific leading to spirituality by controlling of various parts of involving nervous system.

### References:

1. Sharma, P.V. *Charak Samhita*. Sutrasthana 1/46-47, Vol. 1, Ed. and tranl. Revised ed. 2014, p.6. Chowkhambha Orientalia, Varanasi.
2. Srivastava, C.M. (2004). *Chamatkari Kunadali Shakti Avam Dhyana Yoga*. p.11. Manoj Publications, Delhi.
3. Available on: <https://vedpuran.files.wordpress.com/2011/10/rigved.pdf> (1.116.22) (Accessed on 25-3-18).
4. Zhegunov, G. (2012). Material Basis of Life. *The Dual Nature of Life*. pp. 19-35. The Frontiers Collection. Springer, Berlin, Heidelberg.
5. Prek, M., Mazek, M. and Butala, V. (2008). An Approach To Energy Analysis Of Human Physiological Response To Indoor Conditions And Perceived Thermal Comfort. 7th International Thermal Manikin and Modelling Meeting-University of Coimbra, Portugal. September.
6. Roh, E. and Kim, M.S. (2016). Brain Regulation of Energy Metabolism. *Endocrinology And Metabolism*. 31 (4): 519-524.
7. Available on: <https://www.ck12.org/biology/nerve-impulse/lesson/The-Nerve-Impulse-Advanced-BIO-ADV/> (Accessed on 25-3-18).
8. Available on: [http://patf-biokyb.lf1.cuni.cz/wiki/\\_media/vyuka/human\\_physiology\\_-\\_kapitola\\_1.pdf](http://patf-biokyb.lf1.cuni.cz/wiki/_media/vyuka/human_physiology_-_kapitola_1.pdf) (Accessed on 25-3-18).
9. Squire, L., Berg, D., Flyod, E. B., Sascha, D.L., Gosh, A. and Spitzer, N.C. (2012). *Fundamental Neuroscience*. 4<sup>th</sup> ed. p. 628. Elsevier Academic Press, Amsterdam.
10. Available on: <https://en.wikipedia.org/wiki/Nerve> (Accessed on 25-3-18).
11. Gopi Krishna (1972). *Kundalini – The Secret of Yoga*. p.44. F.I.N.D. Research Trust, Ontario and Kundalini Research Foundation Ltd., USA.
12. Sritaranath Bhattacharya (1062). *Vachaspatyam, (Brihat Sanskritabhidhanam)*. Compilation. vol. III. p. 2093, Chowkhamba Sanskrit Series office, Varanasi.
13. Raja Radha Kanta Deva (1967) (3<sup>rd</sup> Ed.). *Shabdkalpadrum*. Vol. II. p.140. Chowkhamba Sanskrit Series office, Varanasi.
14. Available on: <https://vedpuran.files.wordpress.com/2011/10/rigved.pdf> (1.89.10) (Accessed on 26-3-18).
15. Robert E. Svoboda (1993). *Aghora II: Kundalini*. pp.62-63. Brotherhood of Life Publishing Albuquerque, New Mexico, USA.
16. Available on: [http://merki.lv/vedas/Upanishadas/Yoga%20Chudamani%20Upanishad%20\\_eng\\_.pdf](http://merki.lv/vedas/Upanishadas/Yoga%20Chudamani%20Upanishad%20_eng_.pdf) (Accessed on 26-3-18).
17. Aiyar, K.N. (1914) (Translator). *Thirty Minor Upanishads*. p.224. Madras.
18. Available on <https://www.healthpages.org/anatomy-function/spinal-nerve/> (Accessed on 26-3-18).
19. Available on: <https://www.britannica.com/science/human-nervous-system/The-peripheral-nervous-system#ref605806> (Accessed on 27-3-18).
20. Susan S. (2008) (Ed.). *Gray's Anatomy: The Anatomical Basis of Clinical Practice*. 39<sup>th</sup> Edition. p. 1124. Elsevier Churchill Livingstone, Spain.
21. Available on: [https://en.wikipedia.org/wiki/Pudendal\\_nerve](https://en.wikipedia.org/wiki/Pudendal_nerve) (Accessed on 27-3-18).
22. Available on: <https://courses.lumenlearning.com/boundless-ap/chapter/distribution-of-spinal-nerve/> (Accessed on 27-3-18).
23. Valerie C. Scanlon and Tina Sanders (2007). *Essentials of Anatomy and Physiology*. (5<sup>th</sup> ed.). p.174. F.A. Davis, Philadelphia, USA.
24. Available on: <https://study.com/academy/lesson/lumbar-plexus-nerve-function.html> (Accessed on 27-3-18).
25. Available on: <https://www.healthline.com/human-body-maps/thoracic-nerve#1> (Accessed on 27-3-18).
26. Available on: <https://www.spine-health.com/conditions/spine-anatomy/cervical-nerve> (Accessed on 27-3-18).
27. Available on: [https://en.wikipedia.org/wiki/Cranial\\_nerve](https://en.wikipedia.org/wiki/Cranial_nerve) (Accessed on 27-3-18).
28. Available on: <https://en.wikipedia.org/wiki/Brainstem> (Accessed on 27-3-18).
29. Available on: [https://en.wikivet.net/Forebrain\\_-\\_Anatomy\\_&\\_Physiology](https://en.wikivet.net/Forebrain_-_Anatomy_&_Physiology) (Accessed on 27-3-18).
30. Available on: <https://en.wikipedia.org/wiki/Cerebrum> (Accessed on 27-3-18).
31. Shastri, J.C. (2007). *Saraswat Kundalini Mahayoga*. 2<sup>nd</sup> Edition. p.31. Nirmohibandhu Publication, Lucknow, India.
32. Vasuna, Sriharicharana (1964). *Shabdkalpadrumah*. Syar-Raja-Radhakantdev Bahadur (Ed.). Vol. 4 p. 194. Chowkhamba Sanskrit Series Office, Varanasi, India.
33. Douglas, N. *Tantra Yoga*. p. 71. Munshiram Manoharlal Publication, New Delhi.
34. Vasuna, Sriharicharana (1964). *Shabdkalpadrumah*. Syar-Raja-Radhakantdev Bahadur (Ed.). Vol. 4 p. 240. Chowkhamba Sanskrit Series Office, Varanasi, India.
35. Vasuna, Sriharicharana (1964). *Shabdkalpadrumah*. Syar-Raja-Radhakantdev Bahadur (Ed.). Vol. 4 p. 149. Chowkhamba Sanskrit Series Office, Varanasi, India.
36. Available on: <http://sanskritdictionary.com/?q=yam> (Accessed on 28-3-18).
37. Vasuna, Sriharicharana (1964). *Shabdkalpadrumah*. Syar-Raja-Radhakantdev Bahadur (Ed.). Vol. 5 p. 499. Chowkhamba Sanskrit Series Office, Varanasi, India.
38. Available on: <https://en.wikipedia.org/wiki/Om> (Accessed on 28-3-18).