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RESEARCH ARTICLE

THE POTENTIAL ROLE AND ACTIVATION OF PINEAL GLAND, DR. GURVINDER AHLUWALIA

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ABSTRACT

Objectives: Mental diseases have become common in modern society, treatment of mental disorders by using melatonin, secreted by pineal gland showed good results in the treatment of mental disorders. The pineal gland has long been seen as the seat of consciousness in humans and affects the process of getting 'high'. When the pineal gland is not working properly or is blocked by calcification, causing many neurological ramifications in form of mental disorders, along with other behavioural and chronic physiological disorders. Along with melatonin, the pineal gland also releases neurosteroids, dimethyltryptamine and other biochemicals such as serotonin, tryptamine and pinoline. The objective of this research is to investigate the function of pineal gland in eradication of mental illnesses and other behavioural disorders. The potential role and activation of pineal gland on mental, neurological and spiritual health has been explored in this research. **Method:** In this research, researcher has summarized recent advances in pineal gland, and details of fundamentals given by previous Indian scholars for enlightenment of pineal gland. The pineal gland hardens over time, then calcifies and eventually shuts down. This master gland is reduced in function, due to mechanism of toxicity, that involves the fluoride anion and the calcium ions in the blood to form insoluble calcium fluoride. Calcium and phosphorus deposits in the pineal gland have been linked with aging, Alzheimer's, dementia, and many other mental illnesses. It hardened by electromagnetic fields. Present research pointed out different techniques to nourish the brain, by detoxifying and activating the pineal gland, which further can improve overall health and expanding consciousness. The pineal gland activation causes the brain to expand consciousness and secrete biochemical which are believed by ancient spiritual traditions to open the third eye i.e. visionary power of pineal gland. In terms of spiritual experience, melatonin, an anti-aging and anti-stress agent, quiets the body and mind, allowing access to higher consciousness. Both pinoline and dimethyltryptamine secreted by pineal gland are psychoactive substances causing changes in perception, mood, consciousness, cognition, and behavior. Pinoline enables visions and dream states in the conscious mind. The fundamentals of pineal gland activation included balancing the endocrine system, resultant to effect changes in our body, emotions, cognition, and energy. This paper pointed out different techniques to nourish the brain, by detoxifying and activating the pineal gland, so to improve overall health and consciousness. **Results:** This research summarizes the previous studies and recent advances in the area of pineal gland, by evaluating secondary data. It is being observed that by detoxify the pineal gland we can do a lot to rectify the mental diseases, not only this but also other chronic diseases of which many are adversely affected by Inflammation. Promoting detoxification to refurbish this master gland, improve overall health specifically neurological health and spiritual health. **Conclusion:** There is little research on pineal gland in the treatment of mental diseases. In the future, there would be a breakthrough progress in the treatment of mental disorders field by using detoxification and activation of pineal gland. The potential role of pineal gland on mental disorders would be attached great importance by related disciplines.

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INTRODUCTION

According to theosophy, the pineal is an important psycho-physiological centre and is the source of physical, mental and spiritual health. The pineal gland (also called the pineal body, epiphysis cerebri, or the 'third eye') is a small endocrine gland. It is reddish-gray in colour and about the size of a pea (8 mm in humans).

A tiny gland shaped like a pinecone, residing in the centre of our brains, may hold the secrets to spiritual wisdom, inspiration and psychic awareness (ReShel, 2016). It produces biochemicals such as serotonin, tryptamine, pinoline, melatonin and Dimethyltryptamine (DMT). Melatonin a hormone, affects the modulation of wake/sleep patterns and photoperiodic (seasonal) functions. Development of psychic talents has been closely associated with this organ of higher vision. Considered the most powerful and highest source of

ethereal energy available to humans, the pineal gland has always been important in initiating behavioural (Tosini, 1997) and supernatural powers.

The Pineal Gland – location and significance

The pineal gland is located in the center of the brain, it is at the level of the eyebrows, above and behind the pituitary and hypothalamus (Moller and Baeres, 2014), and positioned near to the centre of the brain between the two hemispheres, tucked in a groove where the two rounded thalamic bodies join. This activates when exposed to light, and has a number of biological functions in controlling the biorhythms of the body. It works in harmony with the hypothalamus gland which directs the body's thirst, hunger, sexual desire and the biological clock that also determines our aging process (Blask and Vaughan, 1983). Because the pineal has more blood flow per cubic volume than any other organ, it may well be the gland with the highest concentration of energy in the body (Macchi and Bruce, 2004). The region of the brain bounded by the pineal, the pituitary, and hypothalamus glands is called the 'Crystal Palace'. The Crystal Palace sits between the left hemisphere of logic and right hemisphere of intuition and between the forebrain of reason and the hind brain of instinct. In humans, pineal cells resemble retinal cells in composition not found elsewhere in the body. It was discovered that, after activation of pineal gland one can able to see the past and foresee the future also.

Objectives

Mental diseases have become common in modern society, treatment of mental disorders by using melatonin, secreted by pineal gland showed good results. The objective of this research is to investigate the function of pineal gland in eradication of mental illnesses and other behavioural disorders. Significance of this research is to study the potential role and activation of pineal gland on mental, neurological and spiritual health. The followings are main aims and objective of this work, such as:

- To examine the pineal gland's role in the production of important neuro-chemicals.
- The second important aspect of this research is to analyze the spiritual aspect of pineal gland, which is further helping in expansion of the consciousness or growth of mental horizons.
- To study its relationship with light and with magnetic fields and its magneto-receptive capacity.
- To investigate the causes of disorders or blockages of pineal gland that involves hormone deficiency along with numerous physiological and psychological effects. Besides, this research is evaluating the symptoms and causes of blockages.
- To evaluate the importance of detoxification of the pineal gland and to enlisting and examining the detoxification process.
- To look into the influences and significance of activated pineal gland and to examine how it helps in balancing the entire endocrine system by controlling other important glandular secretions. To studying and enlisting the activation practices of pineal gland is another crucial aspect of this research work.

METHODS

This is a review article based on secondary data. This paper pointed out the functions of pineal gland, which has long been seen as the seat of consciousness in humans and affects the process of getting 'high'. When the pineal gland is not working properly or is blocked by calcification, causing many neurological ramifications in form of other disorders, along with mental disorders. Beside with melatonin, the pineal gland also releases neurosteroids, DMT and other biochemicals such as serotonin, tryptamine and pinoline. This research also explains different techniques to nourish the brain, by detoxifying and activating the pineal gland, so to improve overall health and consciousness.

The pineal plays a key role in the production of important neuro-chemicals such as:

Melatonin: Melatonin, an anti-stress agent is significant for its effects on our mood, immune function and circadian rhythms i.e. the quality and quantity of our sleep (Berson *et al.*, 2002; Vollrath, 1984). Melatonin is responsible for fighting against free radicals (Strassman *et al.*, 1987; Tan *et al.*, 2007). A decline in melatonin triggers the ageing process in the body (Korkushko *et al.*, 2006; Anisimov *et al.*, 1994). In terms of spiritual experience, melatonin quiets the body and mind, allowing access to higher consciousness (Bowen, 2011). The production of melatonin by the pineal gland is activated by darkness and inhibited by light (Arendt and Skene, 2005). Once released, melatonin circulates through the brain and enters nearby blood vessels for distribution to the rest of the body. When melatonin levels is disrupted, people can experience mood swings and depression.

Other Consciousness Enhancing Neurochemicals: In addition a healthy, activated pineal gland also metabolizes other neurochemicals and protein (Ramasamy, 2006) that coordinate physical and emotional processes. These neurochemicals, including serotonin, pinoline and DMT, are said to be psychoactive neurotransmitters, causing changes in perception, mood, consciousness (Penfield, 1958), cognition, and behavior by connecting the mind and body (Bocchi and Valdre, 1993). Pinoline enables visions and dream states in the conscious mind. It also assists in DNA replication. DMT, is the most powerful psychedelic substance or the 'Spirit Molecule' (Strassman, 2017) produced in the pineal gland during deep meditation and extraordinary conditions viz. sexual ecstasy, extreme physical stress, and near-death experiences. It also released during the 'Rapid Eye Movement' phase of sleep (Shinohara and Inouye, 1994). DMT brings higher awareness and wisdom. It links the body and spirit because of its relationship to visionary experiences and non-ordinary states of transcendent consciousness.

Spiritual Aspects of the Pineal Gland

Pineal gland is tranquillizing organ (Romijn, 1978), its activation causes the brain to secrete biochemicals, which are further expanding consciousness. A healthy, activated pineal gland has been connected with spirituality. Pineal's pinecone shape is found in art and artifacts of many ancient traditions, where it is associated with enlightenment and immortality. With its spines and spirals, the pinecone illustrates/symbolizing 'Growth'.

Relationship with Light

All three glands of the Crystal Palace are extremely sensitive and responsive to light. The cells in the retina that contain a light-sensitive pigment called melanopsin. These cells send messages to the Supra Chiasmatic Nucleus (SCN) of the hypothalamus. The SCN is responsible for controlling circadian rhythms, which influence our sleep, alertness, hormones, temperature, and digestive functions.

Relationship with Magnetic Fields

The pineal gland has magneto-receptive capacity. The pineal gland gets affected due to exposure to electromagnetic (EM) fields, which explains why geomagnetic storms and environmental stress can affect the pineal gland, leading to problems with circadian rhythms and melatonin secretion (Uz *et al.*, 2003). The pineal gland's sensitivity to EM energy, causes it to begin vibrating and activating in concert with the heart. As these two organs entrain together, their high vibration opens the third eye to greater inspiration, intuition, and inner vision (Eakin and Richard, 1973). Because of the pineal gland's connection with spatial orientation and circadian rhythms, our perception of space and time often shifts when the pineal is in a highly aroused state. Such experiences have been mentioned by people, practicing meditation and research is now providing explanations for these phenomena.

Pineal Disorders / Blocked pineal gland

The pineal disorders that involve hormone deficiency along with numerous effects such as disturbances of nocturnal sleep, immune responses (Moller *et al.*, 1998), including changes in cellular system, and protection against oxidative stress (Manev *et al.*, 1996). In birds, rodents, and seasonally breeding mammals, pinealectomy (pineal gland removal) impairs reproduction. In these species there are indications that melatonin stimulates the release of gonadotropin-inhibitory hormone, in turn leading to the suppression of gonadotropins (hormones that act on the ovaries or testes), which may explain the disruptive effects on reproduction. A blocked pineal gland leads to confusion, uncertainty, cynicism, jealousy and pessimism (Schmidt *et al.*, 1995) and Alzheimer's disease (Mahlberg *et al.*, 2008).

Causes of Blockage of Pineal Gland

This process occurs because of presence of toxins in everyday products like fluoride anion, additives, sugars and artificial sweeteners. The pineal gland is especially sensitive to fluoride in the water. Fluoride, and other chemical substances like chlorine, is bad for the pineal as they deposit on pineal tissues rich in calcium. The gland calcifies when it encounters with such chemicals – these calcifications are known as corpora arenacea, or brain sand, and are made up of calcium phosphate, calcium carbonate, magnesium phosphate and ammonium phosphate. Calcification is the buildup of calcium phosphate crystals in various parts of the body. The calcification of the pineal gland is common if the gland is not being used. Due to ageing (Zimmerman *et al.*, 2009), poor diet, exposure to toxins and stress of modern life, the pineal gland gets hardened, then calcified and eventually shuts down. It is also suppressed by EM fields released by mobile phones and other wireless devices.

Detoxification of the Pineal Gland

Through decalcification and activation of pineal gland, one may achieve ecstatic bliss and may able to achieve highest consciousness. It is important to detoxify the body in order to decalcify the pineal gland. In today's world, we are assaulted by enormous range of chemicals, through the air we breathe, the water we drink, and the food we eat. The Pineal Gland is very sensitive to chemicals and it is said that due to modern lifestyles, the pineal has already got shrunk. Today, our pineal gland become the size of small seed or pea as compared to old times.

Detoxification Process: Detoxification process can be divided into two steps viz, firstly ensuring that no further calcification takes place, while at the same time, reversing the calcification that has already occurred. This may require some lifestyle changes, the most important one is to drink good amount of pure water to remove toxins from the body. But, one should avoid tap water, as it is a source of fluoride, which contributes to pineal gland calcification. Other lifestyle changes are: to limit the intake of sugar, caffeine, tobacco and alcohol and to eat organic, natural whole food that is not laced with any genetic modifications or additives. Once we clear the toxin of pineal gland, it can work on awakening the third eye or activate the precious gland.

The Activated Pineal Gland

The activated pineal gland influences our cognition, emotions, and physical state. When the hypothalamus and pituitary entrain with the pulsing vibration of the pineal gland, our whole system can shift toward harmony.

Significance of the Activation of Pineal Gland

Pineal gland has antioxidant property (Bharti and Srivastava, 2009). It influences the pituitary gland's secretion of the sex hormones, follicle-stimulating hormone, and luteinizing hormone (Benson, 1989; Reiter, 1980; Luke, 2001). Through an open and vibrant pineal gland, the highest source of ethereal energy may enter. Cleaning up of the pineal gland raises frequency of the person on which one moves into higher consciousness (Axelrod, 1970). Activating pineal gland is the doorway to many psychic abilities. A list of the benefits and abilities brings include clarity of mind, concentration, perspicuity, bliss, intuition, decisiveness and insight. After activation of pineal gland the person remain in a visionary state (Erlich and Apuzzo, 1985).

Balancing the Endocrine System

The endocrine system is a critical gateway joining physical function (Pevet, 1983) with spiritual experience. The endocrine system includes the following glands: the pituitary, pineal, hypothalamus, thyroid, parathyroid, adrenals, pancreas, and ovaries/testes (Motta *et al.*, 1967). These glands use hormones to effect changes in our body. Hormones are chemical messengers that circulate through the body via bloodstream and coordinate critical body functions. They increase or reduce nerve impulses by acting as neurotransmitters. The balancing of endocrine system, have positive effect on pineal gland, it may also activate by stimulation of right temporal lobe (Penfield, 1958).

Followings are powerful ancient practices for activating the pineal gland

The Spinal Cord Breathing: To increase the activation of the pineal gland, spinal cord breathing is important. In that the rhythmic pulsing of the spinal cord creates an EM field that further charges the cerebrospinal fluid (CSF), this move upward and begins to vibrate and stimulate pituitary and pineal glands. In this breathing, at the same time, the rocking wavelike movement of the pituitary stalk activates the hypothalamus and milks the pituitary (which is connected to the activation of pineal gland). The milking of the pituitary releases more oxytocin and vasopressin. During high level of excitement, oxytocin and vasopressin mix with highly charged CSF into sphenoid sinus, which drain directly down to the throat and giving the nectar (Soma Ras), which is often describe in spiritual experiences, resulting pineal gland activation. During the activation process, CSF completely immerses brain as well as spinal cord. After bathing the brain, half of the CSF gets reabsorbed into the bloodstream in the head region and the other half get into lymphatic drainage and there through lymph, supercharged CSF enters into the body's blood stream and is carried to the different parts of the body. This increase flow, shifts the electrolyte balance i.e., the body's ability to conduct electricity. The greater the conductivity, the more energy flow through nervous system, which further charging the body cells, resultant the person feels rich of energy, enthusiasm and get untiring affect. This EM charged CSF blood, flows through the heart (the strongest EM field of the body) also, when consciousness moves from head to heart, it gives more stronger neural, biochemical and electromagnetic connections between head and heart, and this may lead to ecstatic heart-mind expanding sensations i.e., peak experiences. This all heighten the feeling of hope, serenity and deep relaxation. Another most important aspect of this self amplified positive loop, it has a potential for the ripple positive effect onto existing environment or the world also.

Yogic Visualisation: In yogic visualizations, person may sit up with back straight or lie down completely flat on the back. And after closing the eyes one may stare at the tip of the nose and slowly raise his/her gaze to the bridge of the nose. At the same time, s/he should let go of his/her all conditioned and negative thoughts. Person may acknowledge them, and allow them to flow away. This can clear the mind of all irrelevant thoughts. Besides, s/he may visualize, the escaping of spiritual body from the physical body through the pineal gland. This is the important step in directing the energies required to exercise and activate the pineal gland.

Yogic Breathing: As with all yogic practices, breathing is very important. In this breathing, one should always breathe in through the nose and breathe out through the mouth, by inhaling the maximum capacity of oxygen possible. It is also very imperative to first fill the abdomen and then slowly let chest expand, then fully exhaling through mouth with allowing all the toxins in body to be released.

Sun Gazing: The sun is a great source of power. Sun gazing (Manek, 2017) was a potent way in ancient times to activate the pineal and third eye. During sunrise/sunset, particularly at dawn, the earth's magnetic field is charged; this is the best time to meditate to stimulate the pineal gland. During this period the negatively charged pineal gland, and the positively charged pituitary gland, come together to create a 'light'. By

staring, one may absorb sun's energy which further energizes body, mind and especially pineal gland.

Chant: Chanting causes the tetrahedron bone in the nose to resonate, which causes stimulation of the pineal gland.

Meditation and Focusing: Since energy starts flow with attention, so bringing the attention to the Crystal Palace may help to activate the same. One should meditate through intention; this activates and illuminates the pineal gland and enhanced higher consciousness. During meditation, person should also remove everything that will emit EM fields or create distraction, and may consider visualizing of the decalcification of the pineal gland (Moore *et al.*, 1967) also.

Tapping: Gentle tapping the forehead in between eyebrows, may activates the pineal gland and all three structures of the Crystal Palace. The tapping vibration sends a wave directly back to the pineal gland, and activating it in the gradual process (Smith, 2017).

Pressing: By pressing the tongue to the roof of inner mouth, may activate the pituitary gland and, through its physical and chemical connections with Crystal Palace, this may further activate the pineal gland and hypothalamus as well.

Squeezing: By contracting the anal sphincter and perineum, this sends vibrations to the anus and pelvic muscles. From the pelvis, the vibration then travels up the spine and through dural tube to the occiput. The intracranial membrane system transfers the vibration to the center of the head, and activate both, the pineal and pituitary gland.

Being in Complete Darkness: One should sleep in complete darkness, darkness triggers amplified creation and release of melatonin, as a result activating the pineal gland (Turner, 2014).

Laughing and Smiling: Smiling opens the heart and the Crystal Palace. This allows more light to penetrate in and gives vibration affect to these crucial organs, resultant this reduces stress and relaxes the body. Laughter triggers the release of endorphins, promoting feelings of well-being. Relaxation increases blood flow, and helps in pineal gland activation.

Other Practices

Supplement Diet: One should consider the diet with rich of tryptophan to purify the pineal. Tryptophan is plentiful in chocolate, seaweed, almonds, bananas, dried dates, sesame seeds, chickpeas and peanuts. Apart from this, the list of supplements that support and detoxify the pineal gland includes chaga mushroom, wheatgrass, goji berries, garlic, lemons, watermelon, honey, coconut oil, hemp seeds, cilantro, chlorella, spirulina, blue-green algae, raw apple cider vinegar, zeolite, ginseng, borax, vitamin D3, bentonite clay and chlorophyll, all such ingredients aids in purification of the pineal gland (Coates and Paul, 2005).

Use Essentials Oils: Many essential oils stimulate the pineal gland and facilitate the state of wellness, including lavender, sandalwood, frankincense, parsley and pine. These essential oils, especially Oregano oil may be inhaled directly, added to body oil, burned in a diffuser or added to bathwater to detoxifying and encouraging pineal gland activation.

RESULTS

As a review article, this research summarizes the previous studies and recent advances in the area of pineal gland by evaluating the secondary data. This research work, presenting the fundamentals of pineal gland, especially the detoxification processes and activation practices explicated in the old Indian mythology. In terms of spiritual experience, the *pineal gland activation causes the brain to expand consciousness and secrete biochemicals which are believed by ancient spiritual traditions, to open the third eye*. The biochemical, melatonin believed to be an anti-aging and anti-stress agent, quiets the body and mind. The pineal gland needs pure darkness to secrete melatonin. Both pinoline and DMT secreted by pineal gland are psychoactive agents, causing changes in perception, mood, consciousness, cognition, and behavior. All these enable visions and dream states in the conscious mind, and allowing access to higher consciousness. The fundamentals of pineal gland activation included balancing the endocrine system, resultant to effect positive changes in our body, emotions, cognition, and energy. The pineal gland hardens over time, then calcifies and eventually shuts down. It gets hardened by EM fields. This master gland is reduced in functions by the mechanism of toxicity involves the fluoride anion and the calcium ions in the blood to form insoluble calcium fluoride. Calcium and phosphorus deposits in the pineal gland have been linked with aging, Alzheimer's, dementia, and many other mental illnesses. Essentially, decalcification includes eliminating all the sources of the calcification. Present research pointed out different techniques to nourish the brain, by detoxifying and activating the pineal gland, which further can expand consciousness and improve overall health. By detoxify the pineal gland we can do a lot to rectify the mental diseases, not only mental illnesses but also other chronic diseases of which many are adversely affected by inflammation and hardening of the gland. Promoting detoxification to refurbish this master gland, improve overall health specifically neurological health and spiritual health.

Conclusion

The pineal gland provides perception beyond ordinary sight and gives a different perception of the world around us. This is the place where the brain regulates consciousness and interprets the body's sensory and motor functions. But, there is little research on pineal gland, especially in the treatment of mental diseases. It is vital to our spiritual growth and consciousness to keep our pineal gland clear and free of toxicity. As we become more toxic, the pineal gland gets deactivate more, resultant we lose our spiritual connection to higher energies and our oneness with all others. It also means having a healthy body, being balanced and having the best possible wellbeing. In the future, there would be a breakthrough progress in the treatment of Alzheimer's, dementia, and many other mental disorders by using detoxification and activation of pineal gland. The potential role of pineal gland on mental disorders would be attached great importance by related disciplines.

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