# Iridology- A Review

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#### **ABSTRACT**

Iridology is defined as a photographic science that identifies pathological and functional changes within organs via biomicroscopic iris assessment for aberrant lines, spots, and discolourations. According to iridology, the iris does not reflect changes during anaesthesia, due to the drugs inhibitory effects on nerves impulses, and in cases of organ removal, it reflects the pre-surgical condition. The profession of Homoeopathy is frequently associated with iridology and in a recent survey (2009) investigating the perceptions of Masters of Technology graduates in Homoeopathy of University of Johannesburg, iridology was highly regarded as a potential additional skill requirement for assessing the health status of the patient. It is also known as iridodiagnosis or iridiagnosisis an alternative medicinetechnique whose proponents claim that patterns, colors, and other characteristics of the iriscan be examined to determine information about a patient's systemichealth. It is an analysis of health based on examination of the iris of the eye. Practitioners match their observations to iris charts, which divide the iris into zones that correspond to specific parts of the human body. Iridologists see the eyes as "windows" into the body's state of health.Iridologists claim they can use the charts to distinguish between healthy systems and organs in the body and those that are overactive, inflamed, or distressed. Iridologists claim this information demonstrates a patient's susceptibility towards certain illnesses, reflects past medical problems, or predicts later health problems.

Key words: Iris, Iris Diagnosis, Iris charts

## 1. INTRODUCTION

Iridology, also known as iris diagnosis or iridodiagnosis, is defined as a science that identifies pathological and functional changes within organs via assessing the iris for aberrant lines, spots and discolourations<sup>1</sup>. According to Jensen<sup>2</sup> iridology is the science of establishing acute, sub-acute, chronic diseases in certain organs of the body by evaluating specific areas in the iris. The inspection of the iris as a health indicator has existed since antiquity, but the foundation for iridology was first established<sup>3</sup> in 1670 by Phillipi Meyers, and extrapolated upon by Ignaz Péczely in 1881 and Nils Liljequist (a Swedish homoeopath) in 1890. He also noticed changes in the eye that came with healing and was able to link points on the iris to specific parts of the body. By observing the eye, he was eventually able to identify areas in the body in need of support which would show up in the eye long before physical symptoms would manifest. An American chiropractor, Bernard Jensen (1908-2002), later diagrammatically illustrated the position of specific organs, body parts and functions as manifested in the iris<sup>5</sup>.

Eye is a slightly asymmetrical globe, about an inch in diameter. The front part includes: Iris: the colored part, Cornea: a clear dome over the iris ,Pupil: the black circular opening in the iris that lets light in , Sclera: the white of your eye , Conjunctiva: a thin layer of tissue that covers the entire front of your eye, except for the cornea[see fig.1.1]

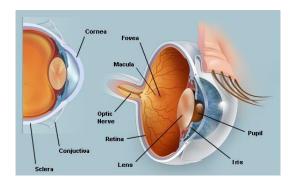


Fig.1.1:showing the morphology features of human eve

Iridology is based on the scientific study of the iris — the coloured part of the eye. Like markings on a map, the iris reveals physiological conditions, psychological health risks, challenges and/or strengths of various organs and personality traits. Through Iridology, we

can get an understanding of your past, present, and potential future health conditions by assessing the various body systems. Your inherited tendencies compounded by toxic accumulations in various parts of your body are also revealed. The Science of Iridology is based on the analogy of one of the most complicated tissue structures of the whole body – the iris.

The overall objective of this review is to summarize the evidence supporting the effectiveness of iridology for diagnosis and / or treatment of any medical condition. Given technological and medical advances, 18 it became a quantitative review of the state of the art of Iridology in the last 20 years. First a differentiated description of the iris is made as reliable biometrics, making an emphasis on the iris as automatic method for identification and verification of an individual using physical characteristics as the main factor of this object of study (techniques used in PDI). As soon as the unique biometric importance of the iris is demonstrated, we proceed to make an evaluation of the works performed in iridology with PDI. The Iris is a biometric identifier used in effective comparison methods from the first developed (Bhattacharjee, 2013; Bowyer, 2012; Yogeshwari, 2012; Muñoz, 2014; Wildes, 1997), most robust and recent algorithms implemented, ranging from implementation of prototypes based on DSPs and transformation of discrete Fourier (Miyazawa, 2006), with images of Purkinje (reflections from objects in the structure of the eye) to obtain a good performance detection algorithm (Lee, 2006; Eskandari, 2017; Nedjah, 2017), with approaches for locating the pupil (inner) and limbic (outer) boundaries of the iris using local statistics like Kurtosis (Kennell, 2006), with biometric keys from binary biometric templates (Rathgeb, 2011) to textures (Ma, 2009). Iridology analyzes the health status based on examination of the iris of the eye of patient.

The iris of a human is not just only relevant for biometry; it could also be for diagnosis of health. Combination of Iridology with PDI gives a more methodological support for clinical diagnoses. More than 150 articles were reviewed, where organic, nutritional, metabolic, nervous, and hormonaletc. It is worth mentioning that imaging has become an essential tool in modern medical science as powerful platforms to register, store, analyze and process medical imaging. Figure 3 shows a latent concern for iridology and the increase in the development of valid algorithms that support this tool. The 1996-1996 records shows 50% unfavorable to the use of iridology as a biomarker, this trend changes over time as will be seen hereafter The areas of iridology consist of a graphic representation of each organ, system or region of the human body. From the pupil, seven zones can be determined in the iris (1 Stomach area, 2 Intestinal area, 3 Adrenal glands, heart and aorta, solar plexus, kidneys, pancreas, 4 Bronchial tubes, pituitary gland, pineal gland, 5 Brain and reproductive organs, 6 Spleen, thyroid, liver, 7 Skin, lymphatic and circulatory systems, sweat glands, motor and sensory nerves)

## 2. DISCUSSION

Iridology is used worldwide and is frequently incorporated as an adjunct to existing diagnostic techniques by a wide range of complementary therapists. According to Ernst4 iridology is regarded as the most invaluable naturopathic tool in the United States of America, while in Germany 80% of the alternative health practitioners (which includes homoeopaths) use it. The profession of Homoeopathy is frequently associated with iridology and in a recent survey by Rostovsky et al5 to investigate perceptions of Masters of Technology graduates in Homoeopathy of the University of Johannesburg; iridology was highly regarded as a potential skill for assessing the health status of the patient. There have been several studies<sup>6, 7</sup> on iridology which have proven iridology to be ineffective in the diagnosis of certain diseases, specifically cancer, gall bladder disease, kidney disease, ulcerative colitis, asthma, coronary heart disease and psoriasis<sup>5, 6</sup>. Other studies though have found it useful in the diagnosis of hypertension and hearing loss <sup>6, 8</sup>. This study investigates the usefulness of iridology in determining a previous acute appendicitis as evidenced by appendectomy. This is based on the precept that exists in iridology that the iris does not reflect changes during anaesthesia, due to its inhibitory effect on nerve impulses, but in cases of organ removal, the iris reflects the pre-surgical condition<sup>2</sup>.

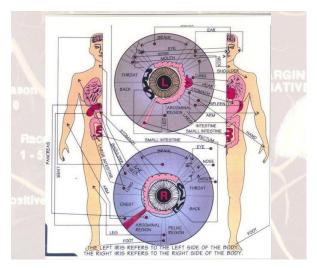


Fig 1.2:iridology chart relating human organs

Generally the results found in this study are in accordance with other studies conducted on iridology wherein the statistical significance of correctly identifying systemic disorders was also no better than chance. These included the diagnoses of [ see fig. 1.2 ] gall bladder disease<sup>11</sup> and kidney disease<sup>15</sup>. Buchanan et al.<sup>6</sup>, who studied the diagnostic accuracy of iridology in systemic disease, specifically ulcerative colitis, asthma, coronary heart disease and psoriasis; and Münstedt et al. 16 concerning cancer diagnosis, also came to the same conclusion The purpose of diagnostic testing as specified by Beers et al. <sup>17</sup> is to help the clinician make choices by reducing ambiguity, making diagnoses or identifying patients who are at risk of developing occult disease. As is clear from this study and literature, iridology as a diagnostic tool does not really appear to meet these requirements. Iridology would rather increase uncertainty as it does not seem to provide a reliable method for the detection of disease. The results obtained in this study on the effect of eye colour and time lapse after appendectomy also indicate the inability of iridology to successfully identify disease from iris photography. Iridologists generally use equipment such as a flashlight and magnifying glass, cameras or slit-lamp microscopesto examine a patient's irises for tissue changes, as well as features such as specific pigment patterns and irregular stromal architecture. The markings

and patterns are compared to an iris chartthat correlates zones of the iris with parts of the body. Typical charts divide the iris into approximately 80–90 zones. For example, the zone corresponding to the kidney is in the lower part of the iris, just before 6 o'clock. There are minor variations between charts' associations between body parts and areas of the iris.

## Repercussions for the Homoeopathic Profession

O'Mathuna<sup>11</sup> is of the opinion that iridology is ultimately harmful to the patient because of its poor efficacy. As was established during this study, the likelihood of generating false positives and false negatives was considerable. The current study attempted to determine the ability of iridology to determine signs of appendicitis in patients that have had an appendectomy and therefore the correct/ incorrect diagnosis would not significantly impact on the patient health. The treatment and management of the patient may take an entirely different route that may not be in the best interest of the patient. It is the opinion of the researchers that the association of iridology with homoeopathic practice potentially may harm the credibility of the profession. Further research providing concrete evidence on some of the tenets of iridology is needed to shift the method from the realm of pseudoscience to reality

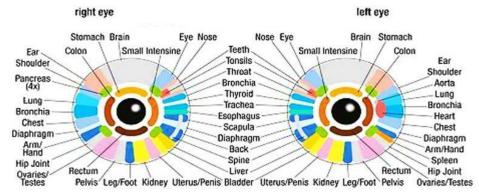


Fig1.3:iridology chart showing specific color spots on human eye

According to iridology, [see fig.1.3] only two basic iris colours exist, blue and brown12. Also it is stated that it is not uncommon for eyes to change colour as treatment progresses to optimal health, for example, from hazel to blue13. This is not supported by medical literature, with changes in eye colour being mainly attributed to pathology in adulthood. Bodeen and Jensen14 state that blue irides are easier to analyse than brown because the iris fibers are more distinct due to the absence of iris pigmentation. Therefore it was conjectured that eye colour might influence the ease of identification of important signs in the iris with light eyes such as blue being the easiest to identify correctly, and brown being the most difficult. In this study, the proportions of the eye colours of participants were relatively equal, with 30% blue, 35% green and 35% brown eyes. Of the participants without appendectomy, the majority had green eyes (43%), followed by brown eyes (40%) and blue eyes (17%). Of the participants with appendectomy, the majority had blue eyes (43%), followed by brown eyes (30%) and then green eyes (27%). Thus, when scoring for the absence of appendectomy, green eyes had a marginal advantage while blue eyes had a relative disadvantage, and when scoring present for appendectomy, blue eyes had the

advantage, with other colours being relatively equal

## 3. CONCLUSION

The validity of iridology as a diagnostic tool is not supported by scientific evvolutions. Patients and therapists should be discouraged from using this method. Medical errors—treatment for conditions diagnosed via this method which do not actually exist (false positive result) or a false sense of security when a serious condition is not diagnosed by this method (false negative result)—could lead to improper or delayed treatment and even loss of life.

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