

Ophthalmic diseases among the impressionist painters

Choroby oczu u malarzy impresjonistów

MAGDALENA BRYŚ, ANNA KRZEŚLAK,
MAGDALENA LASKOWSKA, PAWEŁ JÓŹWIAK, EWA FORMA

Department of Cytobiochemistry
University of Łódź

Abstract

Artists, like anyone else, have suffered from a variety of medical conditions and this is particularly obvious in the case of eye diseases. The aim of this work is to present a summary of previous studies on visual disorders among the impressionist artists and attempt of analysis how their style was changing with the deteriorating state of the eyes. The diseases such as cataracts, short-sightedness, macular damage and eye infections impact their style and technique, the choice of color as well as the subject of painting.

Key words: vision disorders, myopia, cataract, impressionist painters

Streszczenie

Artystów, tak jak wszystkich ludzi, dotyczą różne choroby i szczególnie jest to widoczne, dla odbiorców sztuki, w przypadku zaburzeń widzenia. Celem niniejszego artykułu jest przedstawienie syntetycznej wiedzy na temat chorób oczu diagnozowanych u najsłynniejszych malarzy impresjonistów oraz próba wskazania, w jaki sposób schorzenia te wpłynęły na ich twórczość. Choroby takie jak zaćma, krótkowzroczność, zwyrodnienie plamki żółtej czy infekcje oczu odcisnęły piętno zarówno na stylu i technice ich malarstwa, doborze barw, jak i tematyce obrazów.

Słowa kluczowe: choroby oczu, krótkowzroczność, zaćma, impresjoniści

Corresponding author: dr hab. Magdalena Bryś, prof. nadzw. UŁ,
Katedra Cytobiochemii, Uniwersytet Łódzki, Pomorska 141/143, 90-236 Łódź,
e-mail: zreg@biol.uni.lodz.pl; Tel.: +48 42 635-43-71; Fax: +48-42 635-44-84

Introduction

A common interest among art historians, clinicians and scientists is the effect of diseases and illnesses on artist's work and its transformation as a consequence of the disease and therapy. It is natural that an ophthalmologist should develop an analytic attitude in regard to the visual capacities of artists and search for evidence of normal and abnormal sight as revealed in their paintings [1, 2]. The study of French painters has centered on impressionism because of the major importance of this movement in the evolution of art in the 19th century. The canon of "Major Impressionists" include: Cassatt, Cézanne, Degas, Manet, Monet, Pissarro, Renoir, and Sisley [3-5]. The majority of those painters suffered from ophthalmic diseases [6-8].

Cassatt

The first example is Mary Cassatt (1844-1926), an American impressionist who spent most of her adult life in France. She was diabetic, suffered from cataracts, and underwent multiple operations on her eyes, only to become unable to paint for the last dozen years of her life [9-11]. Cassatt's visual problems forced her to switch from oils to pastels. The precision in her early work is evident in her painting "Lydia Crocheting in the Garden at Marley" (oil on canvas, 1880, The Metropolitan Museum of Art, New York, USA) (Fig. 1.).

As her visual problems advanced, the meticulous lines became strident, bold strokes of color. This can be seen in her pastel "Spring: Margot Standing in a Garden" (oil on canvas, 1900, The Metropolitan Museum of Art, New York, USA) (Fig. 2) [9].

Cézanne

Paul Cézanne (1839–1906) was myopic and also suffered from diabetes. The myopic (or short-sighted) painter could see his canvas clearly but not the more distant object he was painting. Myopic impressionist painters often had their myopia under-corrected. They wanted to see the entire picture, not to see too many details in long-range landscapes [12, 13].

Cézanne's close-range are sophisticated like "Apples and a Pot of Primroses" (oil on canvas, 1890, The Metropolitan Museum of Art, New York, USA) (Fig. 3) or "Still Life with Apples" (oil on canvas, 1890, Hermitage Museum, St Petersburg, Russia) (Fig. 4) while his long-range landscape paintings are less clear and more distorted for example "Mont Sainte-Victoire" (oil on canvas, 1890, Musée d'Orsay, Paris, France) (Fig. 5). A person with normal vision would be able to see nature in the same way if he were to look through a positive lens or, in other words, if he were to make himself myopic [12].

Degas

Edgar Degas (1834-1917) probably had a progressive retinal disease that caused macular damage. Degas remained able to walk around comfortably late in life, which suggests that the damage did not involve the retinal periphery. There was no indication that he had cataracts, although these would have been easily recognizable and operable during his lifetime [14, 15]. Changes in Degas' style correlated closely with this progressive loss of vision. His works in the 1870s were drawn quite precisely with facial details, and attention to the folding of ballet costumes and towels, for example "The Star" (oil on canvas, 1871,

Art Institute Of Chicago, Chicago, USA) (Fig. 6) or “The Dance Class” (oil on canvas, 1873, Musée d'Orsay, Paris, France) (Fig. 7).

As his visual acuity began to diminish in the 1880s and 1890s, he drew the same subjects, but the shading lines and details of the face, and clothing became progressively less refined. It's clearly to see on the series of paintings “Women at the toilet”. Starting from “Woman Combing Her Hair” (pastel, 1886, Hermitage Museum, St Petersburg, Russia) (Fig. 8) through “After the Bath”, “Woman Drying Herself” (pastels, 1889-1900, Courtauld Institute of Art Gallery, London, England) (Fig. 9) and ending on “Woman Drying Her Hair” (pastel on paper, 1905, Norton Simon Art Foundation, Pasadena, USA) (Fig. 10). He drew the same subjects, but the shading lines and details of the face, and clothing became progressively less refined. The same paintings were then blurred to the level of Degas' eyesight at the time of the painting. One study showed that the spacing of his shading lines increased in proportion to his failing visual acuity over nearly 3 decades. After 1900, these effects were quite extreme and many pictures seem shadows of his customary style [16-19].



Fig. 1. "Lydia Crocheting in the Garden at Marley"
(Mary Cassatt, oil on canvas, 1880,
The Metropolitan Museum of Art,
New York, USA).



Fig. 2. "Spring: Margot Standing
in a Garden"
(Mary Cassatt, oil on canvas, 1900,
The Metropolitan Museum of Art,
New York, USA).



Fig. 3. "Apples and a Pot of Primroses"
(Paul Cézanne, oil on canvas, 1890,
The Metropolitan Museum of Art,
New York, USA).



Fig. 4. "Still Life with Apples"
(Paul Cézanne, oil on canvas, 1890,
Hermitage Museum,
St Petersburg, Russia).



Fig. 5. "Mont Sainte-Victoire"
(Paul Cézanne, oil on canvas, 1890,
Musée d'Orsay,
Paris, France).



Fig. 6. "The Star"
(Edgar Degas, oil on canvas, 1871,
Art Institute Of Chicago,
Chicago, USA).



Fig. 7. "The Dance Class"
(Edgar Degas, oil on canvas, 1873,
Musée d'Orsay,
Paris, France).



Fig. 8. "Woman Combing Her Hair"
(Edgar Degas, pastel, 1886,
Hermitage Museum,
St Petersburg, Russia).

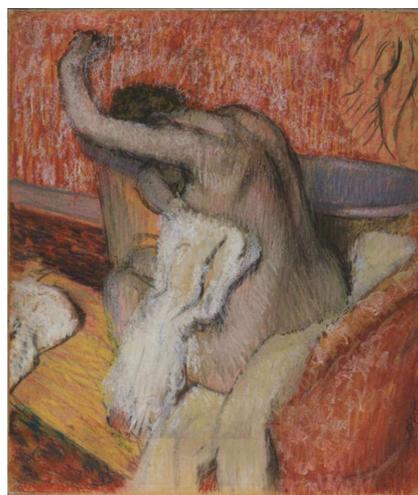


Fig. 9. "Woman Drying Herself"
(Edgar Degas, pastels, 1889-1900,
Courtauld Institute of Art Gallery,
London, England).



Fig. 10. “Woman Drying Her Hair”
(Edgar Degas, pastel on paper, 1905,
Norton Simon Art Foundation,
Pasadena, USA).

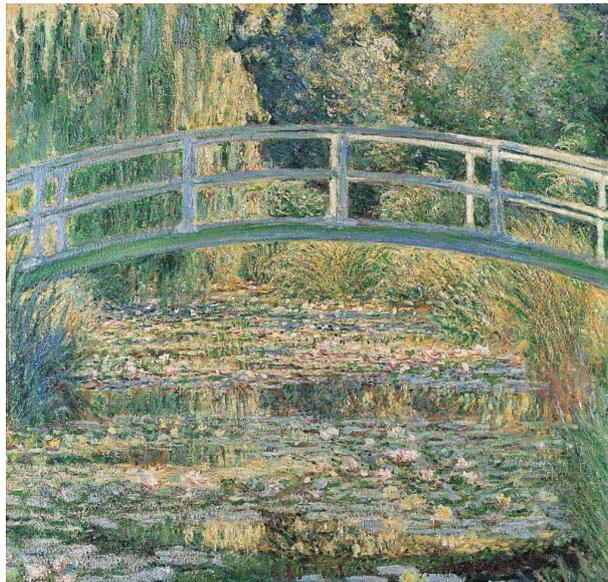


Fig. 11. “Water lily pond”
(Claude Monet, oil on canvas, 1899,
National Gallery,
London, England).

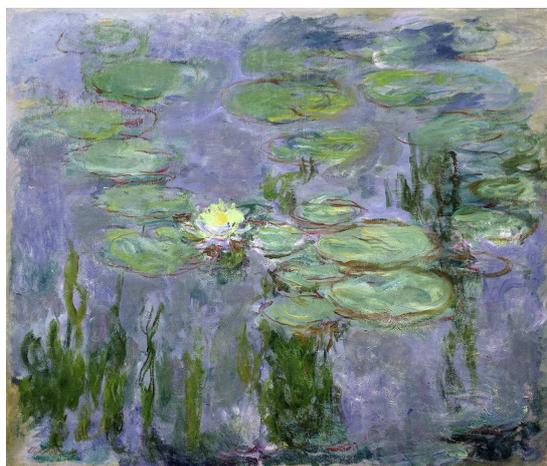


Fig. 12. "Water lilies"
(Claude Monet, oil on canvas, 1915,
Museum Marmottan,
Paris, France).

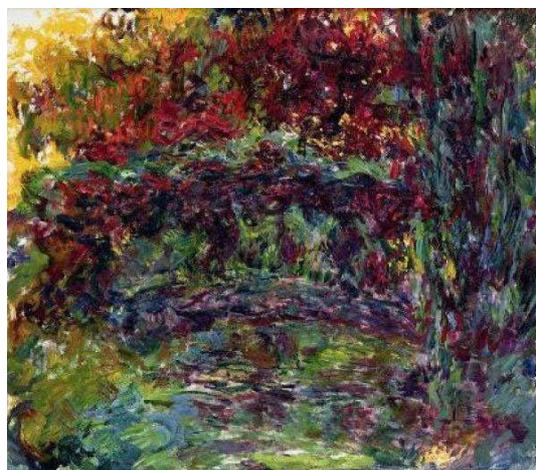


Fig. 13. "The Japanese Bridge at Giverny"
(Claude Monet, oil on canvas, 1918-1924,
Museum Marmottan,
Paris, France).

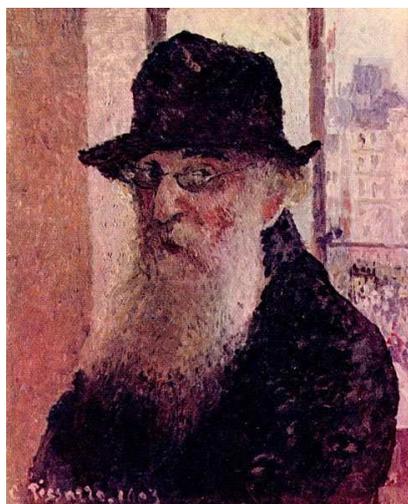


Fig. 14. Self-portrait in glasses
(Camille Pissarro, oil on canvas, 1903,
Tate Gallery,
London, England).

Edgar's maternal first cousin, Estelle Musson, also suffered from gradual bilateral visual loss, and was also known to have light sensitivity early in her life. Estelle became totally blind in the age of thirty. It is likely that Degas and his cousin had a hereditary retinal degeneration primarily affecting their central vision. Degas' retinal disease undoubtedly affected his life and his art but did not prevent him from being one of the most admirable painters of all times [20].

Monet

Claude Monet (1840–1926) is the first painter to be called an Impressionist, is of particular medical interest because of the way failing eyesight due to cataracts affected his late style. He is the only artist whose works have been analyzed in multiple facets including the effect of his deteriorating vision on his late works. Light exposure itself is believed to be a contributing factor in age-related visual deterioration and a risk factor for cataracts. This is especially pertinent in Monet's case, as he insisted on painting on a large scale en plein air

under all weather and seasonal conditions to satisfy his fascination with the varying effects of sunlight on his subject matter. It is known from medical documentation and correspondence that he had cataracts that worsened steadily over the decade from 1912 to 1922 [21]. Even as early as at the age of twenty-seven, Monet complained of trouble with his vision following long hours of painting in sunlight but refused to abandon outdoor painting despite medical advice. Slowly, progressive age-related cataracts manifested as yellowing and darkening of the lens that are directly visible to an examining ophthalmologist and have a major effect on color perception as well as visual acuity. After 1915, Monet's visual difficulties were becoming more serious. However, the yellowing of his lens caused a greater difficulty with his art than the blur. It is clearly visible in Monet's lily pond and the Japanese bridge at Giverny [18]. "Water lily pond" (oil on canvas, 1899, National Gallery, London, England) (Fig. 11) a painting of the pond and bridge before any visual symptoms, "Water lilies" (oil on canvas, 1915, Museum Marmottan, Paris, France) (Fig. 12) painted with moderate cataract, "The Japanese Bridge at Giverny" (oil on canvas, 1918-1924, Museum Marmottan, Paris, France) (Fig. 13) - this version was done with a predominance of orange. These late paintings are almost abstract in the applications of paint and show a predominant red-orange or green-blue tone that is quite different from the subtle color shading that characterizes Monet's earlier Impressionistic work. Like in the case of Degas, there is nothing in Monet's correspondence to suggest that he had any intention of mimicking the abstractions and distortions explored by other painters in the early 20th century [18, 22].

Monet's numerous ophthalmologists wanted not only to treat his cataract, but also to restore the very senses that he relied on to bring him joy and success

in life. There was a misunderstanding of the goal of cataract surgery that resulted in Monet's profound disappointment with the procedure and depression. The changes in vision were not adequately discussed between Monet and his ophthalmologist, creating distress and tension in their relationship. The natural healing process combined with a clever optical lens to optimize color perception were successful in returning to Monet the vision he relied on to reproduce the beauty of life and nature [22-24].

Pissarro

Camille Pissarro the dean of Impressionism, born in 1830, died in 1903 at the age of 73. His productivity during the last 15 years of his life was hampered by recurrent infections around his right eye. In that time the treatment consisted of incision and drainage of the lachrymal sac, and cauterization. Due to this chronic disease he was forced to paint inside, behind closed windows, in order to avoid wind and dust. This situation influenced the subjects of his painting. His painting reflects large crowds Paris avenues and buildings [25].

Lachrymal problems were a popular topic in France in 1891. Unfortunately for Pissarro, he never met an Italian surgeon, Toti, who developed modern lachrymal surgery during Pissarro's lifetime. In 1904, the year following the artist's death, Toti published his method of dacryocystorhinostomy [26].

It is difficult to find portraits of impressionist painters in glasses. However, Pissarro is one of those painters who have at least two self-portraits in glasses. The first is from 1890-91 and the second is from 1903 (oil on canvas, Tate Gallery, London, England) (Fig. 14).

Renoir

August Renoir (1841–1919), despite his mild myopia, never wore glasses. His close-range paintings are distinct, while his long-range paintings are impressionistically blurred [12].

Myopia and hypermetropia have had also been said to have a direct influence on the preponderant color that the artist used. The myopia with his abnormally elongated eye will see reds better while the hypermetropia will be correspondingly better on blues. Thus, the increasing fascination for reds in the case of Renoir may simply be due to the disorder. Curiously enough, the colors from the red end of the spectrum predominate in the paintings of the Chinese and Japanese, who are also predominantly myopic. The Japanese have only recently adopted a specific word for blue [27].

Conclusions

It is generally agreed that many painters suffered from eyes disorders. It is impossible to document all the painters with refractive errors. Our article focused on a well-defined group of painters in order to identify those artists who had an ophthalmic disease. We show how major eye diseases - myopia, hypermetropia, cataract and retinal disease - have their effects on artist's work.

Interestingly, many of the impressionists were myopic and did not wear glasses. The impressionists wanted to convey subjective sensory impressions, attempting, as they put it themselves, to 'capture a retinal image in flight'. Probably ophthalmic diseases influenced their paintings, the form and the use of colors. We can only speculate about the possible effect of various acquired or inherited eyes disorders on this artistic school in particular.

References

1. Backhaus WGK, Kliegl R, Werner JS. Color vision: perspectives from different disciplines. Walter de Gruyter, Berlin, 1998.
2. Cole BL. The handicap of abnormal colour vision. *Clin Exp Optom*. 2004; 87: 258-275.
3. Lanthony P. Les yeux des peintres. L'Âge d'Homme, Lausanne, 1999.
4. Lanthony P. Art and ophthalmology. Kugler Publications, Amsterdam, 2009.
5. Cutting JE. Impressionism and its canon. University Press of American Library of Congress, Lanham, 2006.
6. Emery AE. Medicine, artists and their art. *J R Coll Physicians Lond*. 1997; 31: 450-455.
7. Goh ES, Teo WT. Art and the eye: the impact of ocular pathology on their artistic legacy. *Ann Acad Med Singapore* 2007; 36: 61-64.
8. Ravin JG. The visual difficulties of selected artists and limitations of ophthalmological care during the 19th and early 20th centuries (an AOS thesis). *Trans Am Ophthalmol Soc*. 2008; 106: 402-425.
9. Clement RT, Houzé A, Erbolato-Ramsey C. The women impressionist: a source-book. Greenwood Publishing Group, Westport, 2000.
10. Mir Fullana F. Mary Cassatt's cataracts (1845-1926). *Arch Soc Esp Oftalmol*. 2004; 79: 249-251.
11. Streissguth T. Mary Cassatt: portrait of an American impressionist. Twenty-First Century Books, Minneapolis, 1998.
12. Polland W. The Artist's eye. Myopic artists. *Acta Ophthalmol Scand*. 2004; 82: 325-326.
13. Régnier C. Famous French diabetics. *Medicographia* 2009; 31: 316-323.
14. Zozaya Aldana B. The macular degeneration of Edward Degas. *Arch Soc Esp Oftalmol*. 2011; 86: 229-231.
15. González-Treviño JL, González-Cortés JH, García-Guerrero J. Edgar Degas y la degeneración macular. *Rev Mex Oftalmol*. 2007; 81: 340-344.
16. Marmor M F. A brief history of macular grids: from Thomas Reid to Edvard Munch and Marc Amsler. *Surv Ophthalmol*. 2000; 44: 343-353.
17. Marmor MF. Degas through his own eyes: visual disability and the late style of Degas. *Arch Ophthalmol*. 2004; 122: 795.
18. Marmor MF. Ophthalmology and art: simulation of Monet's cataracts and Degas' retinal disease. *Arch Ophthalmol*. 2006; 124: 1764-1769.

19. Ravin JG. Pissarro, dacryocystitis, and the development of modern lacrimal surgery. *Doc Ophthalmol.* 1994; 86: 191-202.
20. Karcioğlu ZA. Did Edgar Degas have an inherited retinal degeneration? *Ophthalmic Genet.* 2007; 28: 51-55.
21. Wildenstein D. *Monet or the triumph of impressionism.* Taschen, Amsterdam, 2003.
22. Zhou A. Cataracts and the late style of Monet's paintings. *Proceedings of the 17th Annual History of Medicine Days.* 2008; 43-51.
23. Hem E. Monet-lyset og øyelidelsen. *Tidsskr Nor Legeforen* 2008; 128: 1548-1549.
24. Ravin JG. Monet's cataracts. *JAMA* 1985; 254: 394-399.
25. Cernea P. Eye disease in painters-Camille Pissarro. *Clinica Oftalmologică Craiova* 2001; 53: 84-88.
26. Ravin JG, Kenyon CA. Degas' loss of vision: evidence for a diagnosis of retinal disease. *Surv Ophthalmol.* 1994; 39: 57-64.
27. Warner P. Art and eye disease. *Can Med Assoc J.* 1960; 82: 444.