Thyroid Pathology in the Art of Piero della Francesca

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Abstract

Piero della Francesca is now perhaps the most revered Italian painter of his period. In the fresco Resurrection, Piero shows the central soldier (himself) asleep with his head turned up and backwards, in order to make the thyroid visible, and the swelling is clearly seen. In the Polyptych of the Misericordia, the self-portrait of Piero shows the same swelling which betrays a thyroglossal duct cyst. The Madonna del Parto shows signs of an incipient goitre on her slender neck. Goiter is often seen in Renaissance and Bourgogne paintings from Italy, Switzerland, and Northern Europe. For scenes as these the ecclesiastical authority didn’t remove but banned the execution of paintings like these and even changed the idea of the goitred as a bad man.

Keywords: Piero della Francesca, painter, fresco, thyroid, goiter, thyroglossal duct cyst

Piero della Francesca (c. 1415 – October 12, 1492) was a painter of the Early Renaissance. As testified by Giorgio Vasari in his Lives of the Artists, to contemporaries he was also known as a mathematician and geometer. Piero della Francesca is now perhaps the most revered Italian painter of his period, but his great celebrity is fairly recent, by the 17th century he was almost forgotten, and it is only in the 20th century that his severe purity of form and consummate mastery of light and colour have become fully appreciated [1]. His painting was characterized by its serene humanism, its use of geometric forms and perspective. Piero was born in the town of Borgo Santo Sepolcro (Sansepolcro), modern-day Tuscany, to Benedetto de’ Franceschi, a tradesman, and Romana di Perino da Monterchi, part of the Florentine and Tuscan Franceschi noble family. He was most probably apprenticed to the local painter Antonio di Giovanni d’Anghiari, because in documents about payments it is noted that he was working with Antonio in 1432 and May 1438. Besides he certainly took notice of the work of some of the Sienese artists active in Santo Sepolcro during his youth; e.g. Sassetta. In 1439 Piero received, together with Domenico Veneziano, payments for his work on frescoes for the church of Sant’Egidio in Florence, now lost. In Florence he must have met leading masters like Fra Angelico, Luca della Robbia, Donatello and Brunelleschi. The classicism of Masaccio’s frescoes and his majestic figures in the Santa Maria del Carmine were for him an important source of inspiration. Most of his life was spent in the small town of Borgo Santo Sepolcro, and although commissions took him to nearby city-states, his work never had the exposure of that of many of his great contemporaries [1]. Dating of Piero’s
undocumented work is difficult because his style does not seem to have developed over the years.

Like many artists before and after him, Piero included himself in his works. In the first painting completed in 1455-56, entitled The Encounter of Solomon with the Queen of Sheba, Piero is in the second row, wearing a black cap (Figure 1). His goiter, partly obscured by the collar, is less distinct than in the next two paintings.

The Resurrection (Figure 2) is a fresco painted around 1463-1465. Though documentation is lacking, the Residenza, the communal meeting hall in which it was painted, was returned by Florentine authorities to the citizens of Santo Sepolcro, Tuscany. According to tradition and by comparison with the woodcut illustrating Vasari’s Lives of the Painters, the sleeping soldier in brown armor on Christ’s right is a self-portrait of Piero. The artist is portrayed between the sleeping Roman soldiers leaning against Jesus’ grave. Piero shows himself (the central soldier) asleep at the tomb with his head turned up and backwards, as they say “hyperextended”, in order to make the thyroid visible. His face is drawn, his eyelids shut, his eyes slightly bulging, his eyebrows full. A round, smooth swelling in the middle of the neck extends to the inner border of the left sternocleidomastoid (Figure 3).

The Polyptych of the Misericordia (Figure 4), conserved in the Pinacoteca Comunale of Sansepolcro, Tuscany, Italy, is one of the earliest works of Piero della Francesca. The central panel is of the common motif of the Virgin of Mercy or Madonna della Misericordia. The panel portrays the mercifully protective gesture of the Madonna enfolding her followers in her mantle.

Piero resolves the difficulty of dealing with a flat solid gilded background, requested by the patrons, by placing the kneeling members of the confraternity (who commissioned the altarpiece) in the realistic three-dimensional space created by the Madonna’s mantle, a space resembling the apse of a church. Notably, the Madonna is still portrayed larger in size than the human figures, a tradition in medieval painting. Piero is the second man from the right, under the mantle of the Virgin Mary (Figure 5). The same swelling is clearly seen. He was 40 at the time. We know that Piero stopped working at 56 because he was going blind from Vasari’s description, in his Lives of the Famous Painters. Vasari mentioned that Piero also suffered from a tremor of his hands. Although he may have given up painting in his later years, Vasari’s remarks that he went blind have to be doubted, since in 1485 he completed his treatise on regular solids, dedicated to Guidobaldo da Montefeltro, son and heir of Duke Federico, in his own fine handwriting. If the swelling was an “toxic nodule”, this would have accounted for Piero’s tremor, but not for his eye problems. If Piero suffered from Graves’ disease, he should have had exophthalmos. If Piero’s goiter were malignant, he might have died sooner, although malignant thyroid neoplasms may be slow growing. The smoothly defined midline swelling in his neck is too high and too central to be a lesion of a glandular thyroid, the most likely explanation for the mass is that
of a benign thyroglossal duct cyst. The most common locations for a thyroglossal cyst is midline or slightly off midline, between the isthmus of the thyroid and the hyoid bone or just above the hyoid bone. Thyroglossal cysts are associated with an increased incidence of ectopic thyroid tissue. The thyroglossal duct cyst raised many differential diagnostic problems obvious even in the Renaissance paintings. Thus H.E. Emson contradicts L. Bondenson stating that Piero della Francesca’s self portrait from the Polyptych of the Misericordia betrays a thyroglossal duct cyst and not goiter, due to the size and location [2,3]. In that case,
Piero’s blindness, his tremor late in life and ultimately his demise would have been unrelated [4].

The Madonna del Parto (“Madonna of Pregnancy”) (Figure 6) is the name of an iconic depiction of the Virgin Mary shown as pregnant, which was developed in Italy, mainly in Tuscany in the 14th century. The most famous work showing this subject is a fresco painting by Piero della Francesca, finished around 1460. It is housed in the Museo della Madonna del Parto of Monterchi, Tuscany, Italy. Piero della Francesca finished it in seven days of work, using first-rate colors, including a large extent of blu oltremare obtained by lapis lazuli imported from Afghanistan by the Republic of Venice. His fresco offers details worthy of comment (Figure 7). Madonna shows signs of an incipient goitre on her slender neck – typical of country-dwellers who contracted the ailment by drinking nothing but rain water. Presumably this is because della Francesca used a Tuscan model that happened to have a goiter, a typical condition in the foothills of the Apennine Mountains of Central Italy. In fact, goiter is often seen in Renaissance and Bourgogne paintings from Italy, Switzerland, and Northern Europe [5,6]. What motivated della Francesca to wish to paint goiters? Maybe because he had solved the problem of perspective and were able to represent what he saw, “as the eye sees it” [6].

In that time “allegorical goiters” were used to identify devils and vicious characters such as torturers and henchmen [6]. For scenes as these the ecclesiastical authority didn’t remove but banned the execution of paintings like these and even changed the idea of the goitred as a bad man.

Piero made his will in 1487; unmarried and without children, he left his property to his brothers and their heirs. Five years later, on 12 October 1492, he died in his own house, and was buried in the family grave in the Abbey of Sansepolcro. The record of his death can be seen in the Palazzo, now the town museum and art gallery, where his superb painting of the Resurrection still hangs today.

**References**