In a previous survey of radiology in Malta (Cassar, 1972), I reported experiments with X-rays carried out in Malta towards the close of the nineteenth century by Dr. (later Professor) Themistocles Zammit and by Mr. John Ellis of the photographic firm Richard Ellis at 43, Strait Street, Valletta.

In the caption to the published X-rays photograph of a normal hand, signed by Dr. Zammit and dated September 96, I stated that this photograph was the earliest dated X-rays photograph known, until then, to have been produced in the island. Thanks to new evidence I have now firmly established that Dr. Zammit had taken at least one earlier X-rays photograph which he signed and dated 27th August 1896. On this occasion the objects appearing in the X-rays are not of a medical kind but consist of a number of still-life items, i.e. a pince-nez, three rings, two coins and four pins. Apart from the date, the plate bears the words P.H.D. Laboratory Malta. (Fig. 1) There exists another X-rays photograph (not reproduced here) showing an open hand and the same date and wording but no signature. The handwriting, however, is that of Dr. Zammit.

As a point of interest attaching to dates, it may be recalled that in the United Kingdom the first X-rays photograph - a human hand - was taken within a week of Röntgen's announcement, on the 6th January 1896, of his discovery of X-rays to the world (Brit. Med.J. 1945). In Hanover an X-rays photograph of various small objects in a cigarette case is recorded as having been taken some time in March 1896 (Brit. Med.J., 1954).

In a letter of the 5th November 1896 (Cassar, 1972), Mr. John Ellis stated that he had taken X-rays photographs of:

(a) an aluminium cigarette case containing a gold chain and ring;
(b) a tortoise-shell money case, silver mounted and with initials, containing two gold coins;
(c) a cardboard case with silver bicycle warrant;
(d) a wooden box with a silver coin and gold ring;
(e) a leaf of which only the fibres were visible; and
(f) a (human) hand with a "cut finger".

None of these early X-rays photographs taken by Mr. Ellis have been traced but ten variants of them - and a few additional ones - have come to light.

Five of these variants are here described and reproduced:

(i) Fig. 2. Here are shown:

(a) a cigarette case containing a chain, a ring and scissors. This is a variation of the aluminium cigarette case with gold chain and ring mentioned by Mr. Ellis;
(b) a small case with a monogram and coin which recalls the tortoise-shell silver-mounted money case with initials and gold coins listed in Ellis's letter;
(c) a small box with two nibs and a wheel-like object;
(d) another small case containing a key, a ring and a coin similar to the wooden box with silver coin and gold chain referred to by Mr. Ellis.
(ii) Fig. 3. A human hand with a ring on the little finger and another one on the ring-finger. The slenderness of the fingers suggests that it may be the (left) hand of a woman.

(iii) Fig. 4. A human wrist showing the carpal bones, the lower end of the radius and ulna and part of the metacarpus.

(iv) Fig. 5. Portion of human hand with the end of the terminal phalanx of the middle finger missing; very probably amputated either surgically or accidentally.

(v) Fig. 6. Another human hand with the little finger missing, very likely removed surgically.

Figs. 5 and 6 are of special medical interest as they are, so far, the earliest X-rays photographs showing a pathological condition known to have been taken in Malta. Mr. Ellis lists a photograph with a “cut finger” in the letter already referred to (see (f) above). The identity of the sitter/s is not known.

From the technical angle all these photographs have been judged to be of a very good quality in view of the very primitive equipment with which they were produced (Zammit, 1973).

All Mr Ellis’s photographs are undated and unsigned but it is likely that they were made at the end of October or early November 1896; indeed he refers to previous experimental copies done by the X-rays in his letter of the 5th November quoted above (Cassar, 1972). If this surmise regarding dating is correct then Dr. Themistocles Zammit still retains his priority as the pioneer who blazed the trail in the radiological field in Malta with his photos of the 27th August, and of September 96.

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References

British Medical Journal (1945), 2, 608
British Medical Journal (1954), 2, 469