Duplication of X-Rays by Scanning

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adiographs can be duplicated inexpensively using a standard flatbed color image scanner and color printer. The scanner must have a transparency adapter that fits over the bed of the scanner and is at least as large as the x-rays to be scanned. A good model is the Epson Expression 1680 Professional, which costs about \$1,150 and is available from Practice Works* or most computer supply stores. It can scan images as large as $8.5" \times 11.7"$.

The minimum hardware resolution is 1,600 × 3,200 dpi, and the PC should have at least 64MB of RAM and a SCSI or USB interface. Our printer is an Epson Color 800 inkjet.** It is imperative to use the photo-quality paper recommended by the manufacturer of the printer.

Procedure

Replace the scanner cover with the transparency adapter. Scan the radiograph at 75 dpi, and view and adjust the image as necessary using the scanner software. This method will produce better duplicates because any dark, burned-out areas will not appear on the scanned image (Fig. 1). Print as many copies as desired on photoquality paper.

The paper costs about \$9 for a package of 100 sheets, or 9 cents per copy. By comparison, duplicating x-ray film costs about \$85 for a package of 100, or 85 cents per copy. Since the fixer and developing solutions for film duplication cost about the same as a color printer ink cartridge—around \$30—the bottom line is that scanning x-rays can save considerable expense for the practice.

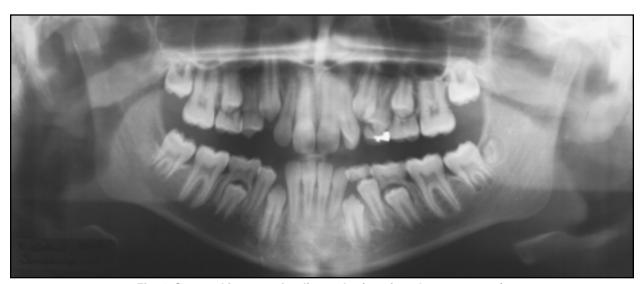


Fig. 1 Scanned images of radiographs (continued on next page).

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Fig. 1 (cont.) Scanned images of radiographs.

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