



Comparison of Time-Efficiency Between Digital and Analog Workflows for Interim Complete-Arch Fixed Dental Prostheses: A Case Report

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PURPOSE

This case report compares the clinical and manufacturing time-efficiency of analog and digital workflows for fabricating interim implant-supported complete-arch fixed dental prostheses under an immediate loading protocol.

METHODS

A 75-year-old female patient underwent delayed implant placement with immediate loading of a maxillary interim complete-arch FDP. Two workflows were compared : (1) analog conventional tooth setup, flasking, and denture processing, and (2) a digital virtual setup and 3D printing. Both prostheses were prepared for same-day conversion, although only one was delivered. Time was recorded using a chronometer at setup, fabrication, and chairside delivery. Patient and operator satisfaction were assessed using a 0–100 mm visual analog scale (VAS).

RESULTS

The analog workflow required a total of **22 hours and 8 minutes** (setup 3:35), flasking 3:00, processing 12:00, polishing 0:30, cutting/ access 0:38 chairside 3: 35 min). The digital workflow took **8h 10 min** (design 3:35 min, printing 1:20, polishing 0:20, chairside 3:35).

CONCLUSION

The digital workflow was more time-efficiency and yielded higher patient and operator satisfaction, supporting its clinical advantages in interim complete-arch FDP fabrication.

Impression and wax-up

Try -in and CBCT

Finish and Process

Conversion day

Final



B- code

