

# Digital Templating: Here to Stay

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One of the worst memories from my residency was when I worked as an intern on the vascular service. I spent late hours of the night roaming the corridors of the hospital for radiographs of patients undergoing surgery the next day. Needless to say, this task was excessively frustrating and offered no educational value. Instead of committing time to prepare for the cases, I would be crawling under desks and chairs searching for films, some of which were nowhere to be found. I recall longing for a day when radiology suites would rid themselves of processing fluids and dark rooms, and instead house computers that could take them into the digital age. I also recall many occasions when surgery was delayed, or even cancelled, as radiographs needed for surgery could not be located. Our patients were not infrequently subjected to “extra” irradiation. Many doctors and orthopedic surgeons my age have similar memories.

Well, digital radiographs did find their way into our surgical discipline, and vascular surgery for that matter—how lucky are current interns? Thanks to digital radiography, our residents now sleep peacefully at night and patients are spared the additional irradiation. The environment does not miss the toxic processing chemicals used by radiology suites either. The films reside in the computers and are always, or almost always, retrievable at a click of a button. Although we still may be faced with the far-too-common frustration of not being able to open the CD from another institution that contains the images of patients attending our outpatient offices, no one can deny that digital radiography has revolutionized our world. As a clinician scientist, I am also aware of the immense benefits that digital radiography offers to research departments. I remember many occasions on which I had to load packets of films into a shopping cart and wheel the available films to the research department, only to find that many of the



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packets were either empty or contained shoulder films in the hip jackets! Now my research fellows need an inexpensive laptop and encrypted password to access radiographs anytime, from any place, and for any patient.

In this issue, a study conducted by Whiddon and colleagues (“Accuracy of Digital Templating in Total Hip Arthroplasty” on page 395) evaluates a very important subject matter. They have demonstrated that preoperative templating using digital radiographs can be as accurate, if not more accurate, than using conventional films for predicting acetabular cup and femoral stem sizes. They need to be congratulated for designing and executing a great study. This study perhaps puts to rest the claims I have heard from many regarding the inaccuracy of digital radiographs for preoperative templating. It certainly gives me ammunition to counter my clinical fellows who are sometimes a few sizes wrong when templating for femoral stem or acetabular components. Perhaps we can move away from blaming digital radiographs for our inaccuracies and concentrate more on learning the task of templating using digital radiographs.

Dr. Whiddon and his colleagues have shared with us the information regarding the type of software they used. I will be amiss if I do not admit to the fact that much improvement in software design is still needed. Not all software programs are as accurate as the one used by Whiddon and colleagues. Not all digital radiographs that I see have the scale placed on the films (How hard is that?), and issues related to projection, penetration, and processing still haunt us. I think it is perhaps unfair to ask for another divine intervention to replace radiology technicians with robots.

## AUTHOR'S DISCLOSURE STATEMENT

The author reports no actual or potential conflicts of interest in relation to this article.

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