

decreased, and the joint can better sustain weight. The two bones lose flexibility but are pain-free and sturdy.¹⁵ Common sites for arthrodesis are the ankles, wrists, fingers, and thumbs. Arthrodesis use varies by site but can be beneficial for a chronically infected and painful joint.²⁷

Arthroplasty

Arthroplasty is a procedure to repair joints that have been damaged, become painful, and are less functional

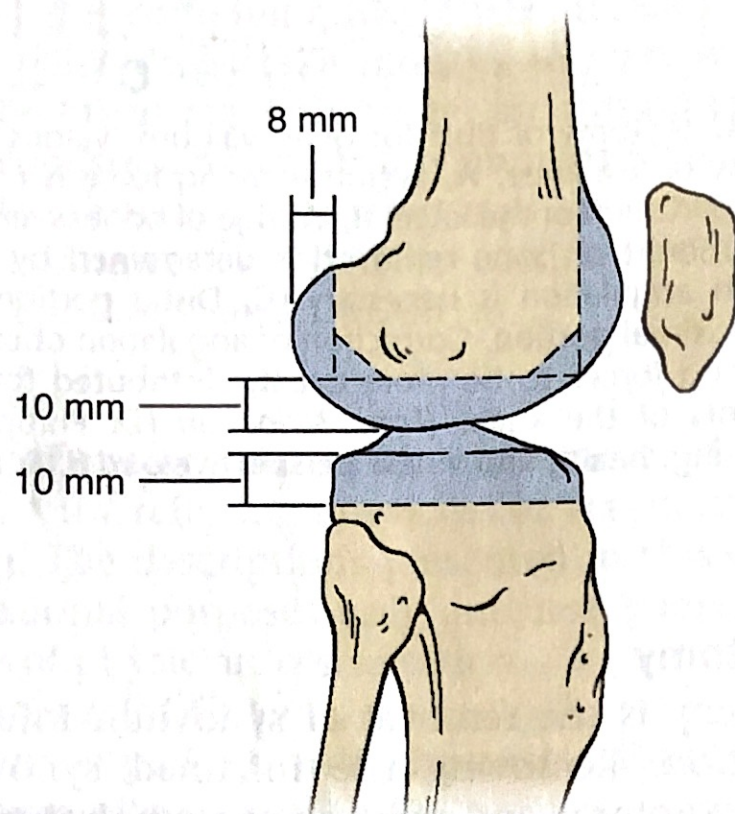


FIG 24-14 In the measured resection technique, as much bone or cartilage (or both) is removed as will be replaced by the thickness of the arthroplasty components. This method attempts to restore the anatomic joint line level. (From Magee DJ: *Pathology and intervention in musculoskeletal rehabilitation*, St Louis, 2009, Mosby.)

(see Fig. 18-8). Total joint replacement is a very successful method for decreasing pain and improving functional ability. The arthritic joint is replaced with metal, ceramic, and plastic parts. The two most common joint replacements are knee and hip, but shoulder, elbow, ankle, and knuckles also can be replaced.²⁷ In general, patients are expected to return to functional levels of strength, mobility, and ROM after 6 months.³ Hip and knee arthroplasties are common surgical interventions in patients with OA³⁶; total hip arthroplasty is the most common procedure in patients with ankylosing spondylitis.²⁵

Arthroscopy

Arthroscopy is not a procedure but rather a means of performing a procedure. An arthroscope is a thin tube with a light at the end connected to a screen. Arthroscopic surgery allows for exploration of a joint to determine what is wrong and to determine how extensive the damage is. Biopsies, cutting loose tissue, repairing cartilage, and smoothing rough surfaces all can be done arthroscopically. Arthroscopic surgery can have a faster recovery time than more invasive procedures because only small incisions are required, and minimal anesthesia is used. Surgeries commonly performed arthroscopically include meniscus repairs, rotator cuff repairs, cartilage damage repairs, and labral tear repair.

GLOSSARY

Atrophy: A wasting away; a decrease in size of an organ or tissue.

Closed chain exercises: Distal end of extremity is fixed to the ground or to a device; for example, keeping your feet on the ground while bending the knees.

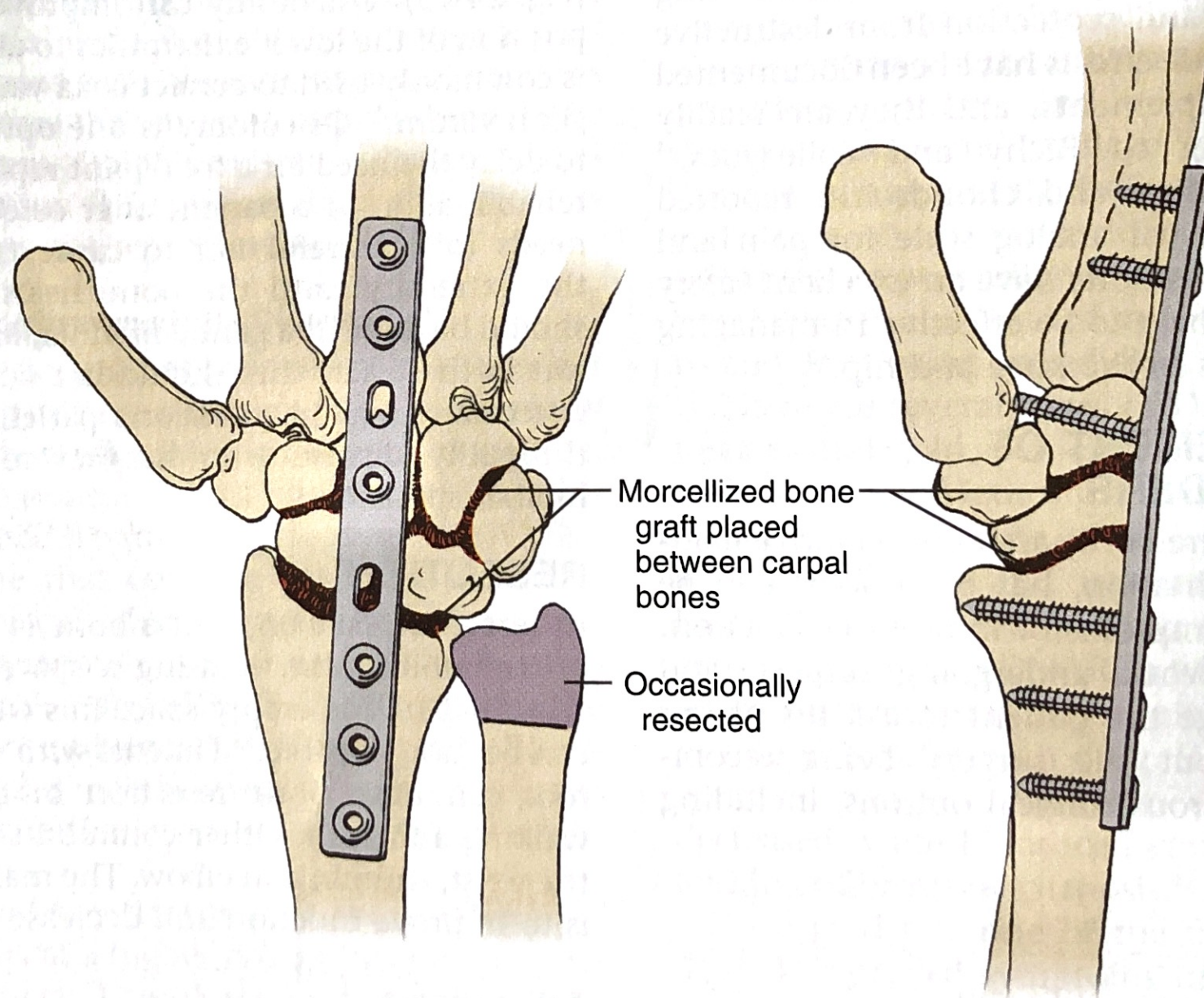


FIG 24-15 Total wrist arthrodesis. (From Magee DJ: *Pathology and intervention in musculoskeletal rehabilitation*, St Louis, 2009, Mosby.)