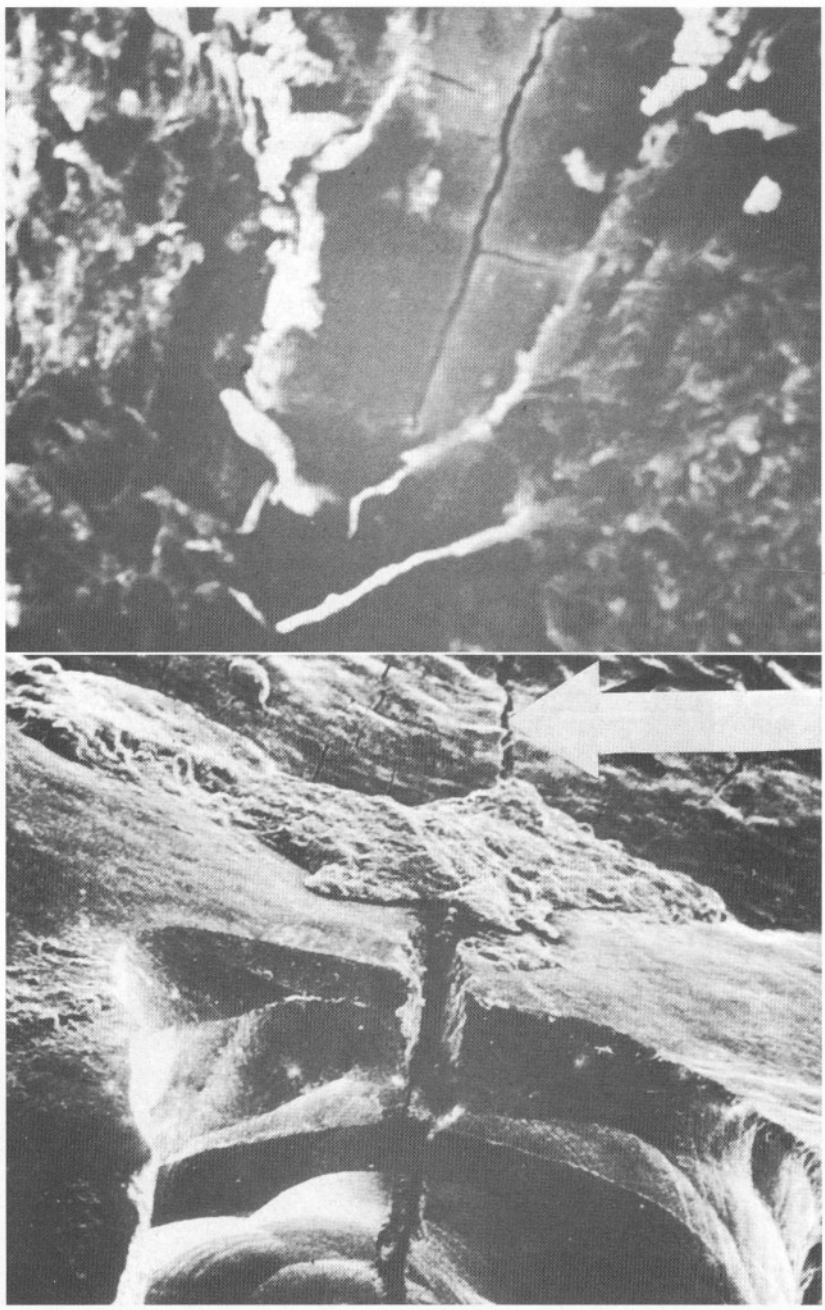


FIGURE 2-36 cont'd B-D, Scanning electron microscope views of increasing magnifications, demonstrating the crack.

occurred with about equal frequency. Only one mandibular first premolar was diagnosed.

The mean age of the patients in this study was 50 years. The youngest patient was 23 years old. Perhaps the more pliable and cushiony periodontal ligament of young persons along with a more resilient and less mineralized dentin prevents fractures at earlier ages. Conversely, the senile or invalid patient has a selectively softer diet high in carbohydrate with little need for great masticatory effort. Further, elderly persons often have fewer opposed molars.

Little difference exists in sex distribution, with 52.3% males and 47.7% females. Most patients in the study showed high peaks and valleys of intercuspal arch relationships, but two or more teeth were found in four patients with severe occlusal abrasion exposing dentin on the entire occlusal surface. Contrary to many clinicians' opinions, bruxism was not noted as a contributory factor.

Treatment

Unrealistic or overambitious case selection leads to a high degree of failure. Efforts have been made to retain all the fractured segments with full coverage in a binding type of restoration. No statistical data are available concerning the success in treatment of fracture cases; however, a realistic