INTRODUCTION

A personal watercraft (PWC) is a small vessel that uses an internal combustion engine powered by a jet pump. They are commonly referred to as JetSki™ and Waverunners™. It is designed to carry one from one to three persons, and to be operated by a person sitting, standing, or kneeling on the vessel rather than the conventional manner of sitting or standing inside the vessel. During the 1997 boating season, 391 PWC-related accidents were reported to the California Department of Boating and Waterways, which resulted in 376 injuries and $709,450 worth of property damage. The percentage of PWC-related accidents is much higher than expected when compared to PWC registration totals. The Department of Motor Vehicles indicates that PWC account for 16% of all boating season accidents is much higher than expected when compared to PWC registration totals. The Department of Motor Vehicles indicates that PWC account for 16% of all fatalities, and 23% of all property damage. Injuries related to PWCs are followed closely by operator inattention (47%), and excessive speed (43%). Only 16% of users ever received formal instruction prior to use. Almost half of the accidents involved collisions between two vessels, with 71% involving collisions with another PWC. A study by the National Transportation Safety Board (NTSB) notes that while boating fatalities have dropped overall in the past decade, those involving PWC have risen dramatically. The main cause of death is not drowning but blunt trauma. Injuries may be severe and not unexpectedly a large proportion involve orthopaedic injuries. The purpose of this study was to expand and clarify the injuries related to personal watercraft traumas.

Injuries related to personal watercrafts have risen dramatically over the past several years, becoming one of the leading causes of recreational water-sport injuries. These injuries can be severe, usually requiring surgical intervention. A frequent pattern of injury is fracture to the lower extremity, particularly to the hip and femur. Twelve of 32 fractures (37.5%) were due to intertrochanteric or mid-shaft femur fractures. All these required surgical treatment. When combined with fractures of the tibia-fibula, 50% of all fractures are of the lower extremity."