The Root-Fractured Tooth: information for patients/parents/caregivers

Before the accident this tooth was held in place by fibers and cells called the periodontal ligament. Some of these fibers were torn apart and some cells were damaged by the accident. A root fracture (break) can happen anywhere along the length of the root. Where the fracture occurred can affect the outlook for that tooth and root.

Things that can cause this tooth to fail are:
- Infection can lead to the root rapidly dissolving (months to a year)
- Tooth can become part of the bone and simply dissolve over time (year(s))
- Child can grow but tooth remain in its same position. Tooth will appear 'short' and have to be removed (year(s))
- Fracture position or amount can make the tooth unrestorable (cannot be fixed)
- Additional injuries to the crown or nearby teeth

What do we know?
- If the tooth is not mobile and a fracture is visible on the x-ray no treatment is required.
- If the tooth was mobile following the accident and the fracture is near the crown the outlook for the tooth is much worse than if it was in the middle or near the tip of the root.
- If the crown of the tooth has been fractured or the pulp is exposed the outlook for the tooth is much worse than if the crown had not been fractured.
- Things that can happen in the future include calcification of the nerve canal and/or dental pulp death. A dead pulp will require root canal treatment or extraction.

Responsibilities of the dentist
- inform patient/parent/caregiver of the prospects/outcomes of root fractures
- attempt to reposition the tooth if the patient/parent/caregiver wishes
- prevent/control infection
- splint the tooth if required and remove the splint at the appropriate time

Responsibilities of the patient/parent/caregiver
- allow x-rays for diagnosis of damage and monitoring of healing
- cooperate for repositioning/splinting
- comply with instructions if antibiotic coverage is required
- return for post-operative splint removal/x-rays at the appropriate times as described by the dentist.