Splinting

Patient attends with trauma to permanent tooth with displacement (Fig 4.1)

Take a detailed medical, dental and accident history of trauma (safeguarding issues?)

Examine head and neck for extra-oral and intra-oral bony and soft tissue injuries (lacerations/haematoma) and missing tooth fragments (e.g. embedded in lips)

Assess teeth with trauma and surrounding teeth (Note colour, mobility, tenderness)

Special investigations- photography, vitality testing (may be unreliable), radiographs (Periapical/OPG/occlusal)

Advice adapted from IADT - Avulsion of permanent teeth 2020

Explain to patient/guardian the splinting process and obtain consent

+/- LA- Reposition unstable tooth fragment and any bony segments (for root fracture confirm position radiographically). Suture any gingival lacerations (e.g. in alveolar fracture cases)

Splint teeth using appropriate wire material-1 tooth either side of traumatised tooth (etch, bond, composite/GIC may be used) (Fig 4.1)

Give OHI (interdental cleaning advice, soft brush), soft diet 2 weeks, chlorhexidine gluconate mouthwash BD 2 weeks. Advise patient to monitor discoloration of teeth and any pain.

Type of trauma	Splint type	Splinting time	Follow up
Root fracture	Passive flexible	a. 4 weeks b. If near cervical -up to 4months	a. 4 weeks splint removal6-8 weeks, 4, 6, 12 monthsb. Cervical 4 month to remove splint and then 6months
Subluxation	Passive flexible	2 weeks	2 weeks remove splint. 12 weeks, 6, 12 months
Extrusive luxation	Passive flexible	2 weeks	2 weeks remove splint. 4, 8, 12 weeks, 6, 12 months
Lateral luxation	Passive flexible	4 weeks	Post 2 weeks endodontic evaluation. 4 weeks splint removal. 8,12 weeks, 6,12 months
Intrusive luxation	Passive flexible	4 weeks	Incomplete root formation-allow for re-eruption without intervention for 4 weeks. No re-eruption-orthodontic repositioning. Complete root formation- <3mm- allow for re-eruption. If no eruption within 8 weeks, then surgical repositioning, and splint. 3-7mm-reposition surgically/orthodontically. >7mm surgical repositioning
Alveolar fracture	Rigid/ flexible	4 weeks	4 weeks splint removal. 6-8 weeks, 4,6,12months