# Preventing hypocalcemia in major trauma - A qip in a major trauma centre in UK

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**Introduction:**
Addenbrookes is a major trauma centre in the UK dealing with trauma of all ages and mechanisms. Major trauma is often complicated by hypocalcaemia which we have recognised that is often under-recognized and under-corrected.

**Aims / Objectives:**
To improve the knowledge gap among clinicians concerning hypocalcaemia as a complication of Major Trauma.

**Materials / Methods:**
Utilising the PDSA cycle, we initially retrospectively reviewed the notes of over 40 major trauma patients between August 2022 and January 2023 and carried out a clinician's survey. Following a period of formal teaching and education in October regarding hypocalcaemia as a complication of major trauma, the clinician survey was repeated.

**Results:**
In the initial survey, only 25% of clinicians recognized hypocalcaemia in major trauma - potentially leading to poorer patient outcomes. Following the implementation of the teaching programme, the incidence of clinicians recognizing hypocalcaemia rose to 75%. The prevalence of calcium prescribing by clinician's also rose from a trough level of 16% pre-education to 60% post-education

**Discussion:**
While hemorrhage in major trauma leads to calcium loss, resuscitation with blood products contributes to hypocalcaemia through citrate induced calcium chelation.

**Conclusion:**
Hypocalcaemia is an under-recognised complication of major trauma and education helps to promote it's correction.