# An audit on the effectiveness of anaemia correction in cervical cancer patients treated with concurrent cisplatin and radiotherapy

**Descriptor:**

In cervical cancer patients undergoing radical radiotherapy with concurrent cisplatin chemotherapy,  haemoglobin (Hb) levels to be monitored and anaemia (Hb <120g/l) corrected to >120g/l.

**Background:**

Anaemia is a modifiable poor prognostic factor with high incidence in cancer of the cervix. There is increasing evidence that patients who are anaemic during radiotherapy have a worse prognosis than patients who are not and that correcting anaemia increases cure. In patients with cancer of the cervix undergoing radical treatment, anaemia correction to a target of haemoglobin (Hb) >120g/L has been mandated in local and national guidelines.

## The Cycle

**The standard:**

Scottish Intercollegiate Guidelines Network (SIGN) National clinical guideline -

1. Patients with cervical carcinoma undergoing radiotherapy or chemoradiotherapy should have their haemoglobin level monitored and corrected if it falls below 120 g/l

2. Anaemia should be corrected with either blood transfusion or erythropoietin and iron products after consideration of the attendant costs, risks and benefits

**Target:**

100% of patients with cervical cancer undergoing chemo-radiation should have their Hb levels monitored and corrected if it falls below 120g/l.

## Assess local practice

**Indicators:**

1. Percentage of cervical cancer patients having Hb level monitored before and during radical chemoradiation

2. Proportion of anaemic patients being corrected with blood transfusion or erythropoietin and iron products  to maintain Hb level >120g/l

**Data items to be collected:**

1. Baseline Hb before and at the time of weekly review prior to synchronous chemotherapy with radiotherapy

2. How many of these patients have anaemia (Hb<120g/l)

3. Proportion of anaemic patients being corrected to Hb level >120g/l

**Suggested number:**

20 consecutive patients with cervical cancer consented for radical chemo-radiation.

**Suggestions for change if target not met:**

1. Include Hb >120g/l in the check list for weekly cisplatin chemotherapy in cervical cancer patients

2. Provision for correction in terms of prescription if Hb < 120g/l should be made even if asymptomatic

3. Educate the clinical team involved about significance of anaemia correction in cervical cancer and about national guideline

4. Develop a robust clinical pathway for such correction

5. Electronic chemotherapy prescription would facilitate regular Hb monitoring,prescription process and communication with the teams

**Resources:**

1. Phlebotomist service for weekly blood test prior to clinical review for chemotherapy

2. Chemotherapy booking co-ordinator to pick up the blood transfusion prescription for anaemic patients and  liaise with chemotherapy staff

3. Chemotherapy staff to contact blood bank for transfusion the following day when patients attend for chemotherapy and book extra 2-4 hours of chair occupancy

**References:**

1. Grogan M et al. CANCER 1999; 86:1528-1536
2. Candelania. M et al Med Oncol. 2005: 22(2) 161-8
3. Evans JC, Bergsio M.D. Radiology 1965;84:708-717
4. Hockel et al. Cancer Res.1996:56:4509-4515
5. Dunst J, Vaxpel P, Kelleher DK.Tumour Hypoxia :1999

**Submitted by:**

Dr Ravi Kumar Dandamudi

**Co-authors:**

Fernando I

El-Modir A

**Published Date:**

Thursday 4 June 2015

**Last Reviewed:**

Thursday 4 June 2015