“Problematiche cliniche”

- **Gravidanza**
- **Chirurgia**
- **La salasso terapia**

Pregnancies in MPN (ELN – WP 9)
- update 02/2015 -

9 countries

- Austria
- Czech Republic
- Denmark
- France
- Germany
- Italy
- Romania
- Slovakia
- Switzerland

317 pregnancies in 154 patients

- Essential thrombocythemia
  - n = 115 (239 pregnancies)
- Polycythemia vera
  - n = 30 (69 pregnancies)
- Primary myelofibrosis
  - n = 9

Quale condotta in caso di gravidanza?

1. Stratifica il rischio

At least one of the following defines high-risk pregnancy:

- previous major thrombotic or bleeding complication
- previous severe complications*
- platelet count > 1500 x 10^9/L

* Severe pregnancy complications:
≥3 first-trimester or ≥1 second or third-trimester losses,
birth weight <5th centile of gestation, pre-eclampsia, intrauterine death or stillbirth

La terapia in gravidanze a basso rischio

- Target hematocrit should be kept below 45%
- Aspirin 100 mg/day
- LMWH 4000 U/day after delivery until six weeks postpartum

La terapia nell'alto rischio

Come nel basso rischio e in più

- If previous major thrombosis or severe pregnancy complications: LMWH throughout pregnancy
  (stop aspirin if bleeding complications)
- If platelet count > 1500 x 10^9/L: consider IFN-α
- If previous major bleeding: avoid aspirin and consider IFN- α to reduce thrombocytosis

Pregnancies in MPN (ELN – WP 9)
- preliminary results: Conclusions -

Pregnancy outcome in 285 of 317 pregnancies[1) 2) 3)]

- Live birth rate 75% (ET: 78%, PV 72%)
- Spontaneous abortions ~ 21% (ET: 20%, PV 27%)
- Major bleeding ~ 3,5 % (ET: 3%, PV:7%)
- Venous Thrombosis VTE ~ 1% (ET: 1%, PV: 2%)

1) elective abortions: n=13 2) pregnancies ongoing: n=19 3) pregnancy before diagnosis MPN: n=68

Chirurgia

Nel cancro la trombosi venosa profonda è 2 volte superiore a quello che si osserva nei pazienti senza cancro

La profilassi con eparina riduce le trombosi

Post-surgery outcomes in PV and ET: a retrospective survey

Design: multicenter retrospective analysis

Population: consecutive patients from Italian tertiary care hematology centers

Patients: 105 PV and 150 ET

Surgical interventions = 311 (156 minor surgery; 155 major surgery)

General anesthesia = 31.4% in minor surgery; 92.9% in major surgery

Prophylaxis (antiplatelet or heparin): 59% in minor surgery, 80.7% in major surgery

Major intervention

- General surgery: surgeries that involve the thorax, abdomen, or pelvis lasting longer than 30 minutes
- Orthopedic surgery: Hip or knee replacement or hip fracture
- Cardiovascular surgery: Valvular replacement and coronary by-pass
- Neurosurgery: Intracranial intervention

Minor interventions

- All other interventions including diagnostic procedures

Ruggeri M et al. Blood 2008;111:666-71.

Surgery in ET and PV - Conclusion

- Despite the active approach, a significant proportion of surgeries (5.1% of major surgeries and 2.5% of minor surgeries) were complicated by DVT (5-fold increase with respect to the normal population)
- High rate of arterial thrombosis (3.8%) was observed after intervention (specific for patients with MPN)
- The rate of hemorrhagic complication is higher than those observed in clinical trials evaluating heparin prophylaxis and in surgical patients with cancer (predisposition in MPN)

DVT, deep venous thrombosis

Ruggeri M et al. Blood 2008;111:666-71.

Recommendations:
Perioperative prevention of venous thromboembolism in PV and ET

- *It seems appropriate to restrict the use of antithrombotic prophylaxis with LMWH in patients with PV undergoing major surgery*
- *Conversely, antiplatelet drugs may be the optimal choice in patients with ET with several arterial risk factors*
- *This approach should be weighed against the surgery specific bleeding risk (surgeries involving mucous tissue)*

LMWH, low mol. weight heparin

Ruggeri M et al. Blood 2008;111:666-71.

Trattare la PV con Salassi

Fase iniziale

Salasso 250-500 cc di sangue a giorni alterni fino ad ottenere HCT <40 o 45%.

Nell'anziano e nel paziente con patologia cardiaca o cerebrovascolare, rimuovere 200 2 volte alla settimana. Può essere indicato in questi casi sostituire con sol fisiologia per evitare ipotensione posturale.

Fase di mantenimento

Una volta ottenuta la normalizzazione dell'ematocrito fare emocromo ogni mese e

salassare se ht >45%

Una volta stabilizzato e valutata la frequenza di salassi ristabilire la frequenza delle visite