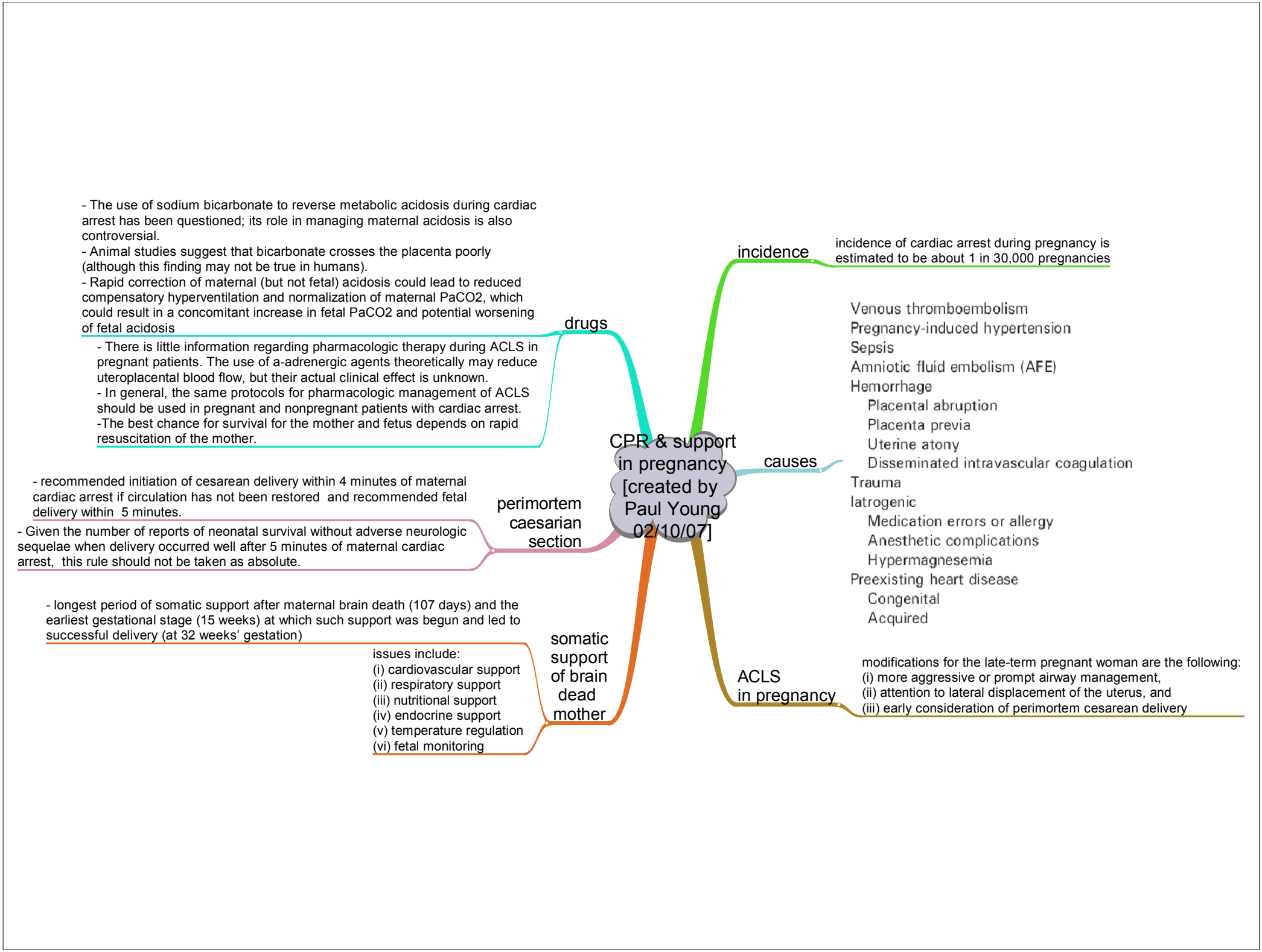
CPR & support in pregnancy [created by Paul Young 02/10/07]
drugs
- The use of sodium bicarbonate to reverse metabolic acidosis during cardiac arrest has been questioned; its role in managing maternal acidosis is also controversial.
- Animal studies suggest that bicarbonate crosses the placenta poorly (although this finding may not be true in humans).
- Rapid correction of maternal (but not fetal) acidosis could lead to reduced compensatory hyperventilation and normalization of maternal PaCO2, which could result in a concomitant increase in fetal PaCO2 and potential worsening of fetal acidosis
- There is little information regarding pharmacologic therapy during ACLS in pregnant patients. The use of a-adrenergic agents theoretically may reduce uteroplacental blood flow, but their actual clinical effect is unknown.
- In general, the same protocols for pharmacologic management of ACLS should be used in pregnant and nonpregnant patients with cardiac arrest.
-The best chance for survival for the mother and fetus depends on rapid resuscitation of the mother.
perimortem caesarian section
- recommended initiation of cesarean delivery within 4 minutes of maternal cardiac arrest if circulation has not been restored and recommended fetal delivery within 5 minutes.
- Given the number of reports of neonatal survival without adverse neurologic sequelae when delivery occurred well after 5 minutes of maternal cardiac arrest, this rule should not be taken as absolute.
somatic support of brain dead mother
- longest period of somatic support after maternal brain death (107 days) and the earliest gestational stage (15 weeks) at which such support was begun and led to successful delivery (at 32 weeks' gestation)
issues include:
(i) cardiovascular support
(ii) respiratory support
(iii) nutritional support
(iv) endocrine support
(v) temperature regulation
(vi) fetal monitoring
incidence
incidence of cardiac arrest during pregnancy is estimated to be about 1 in 30,000 pregnancies
causes
Venous thromboembolism
Pregnancy-induced hypertension
Sepsis
Amniotic fluid embolism (AFE)
Hemorrhage
Placental abruption
Placenta previa
Uterine atony
Disseminated intravascular coagulation
Trauma
Iatrogenic
Medication errors or allergy
Anesthetic complications
Hypermagnesemia
Preexisting heart disease
Congenital
Acquired
ACLS in pregnancy
modifications for the late-term pregnant woman are the following:
(i) more aggressive or prompt airway management,
(ii) attention to lateral displacement of the uterus, and
(iii) early consideration of perimortem cesarean delivery