platelet function to be within normal limits. An epidural catheter was placed. The postpartum platelet count was $60{,}000 \cdot \mu l^{-1}$. The patient's postpartum course was uncomplicated.

Thrombocytopenia is of concern to the anaesthetist because there may be inadequate platelet function. There is the potential for bleeding in the epidural or subarachnoid space, leading to compression of the spinal cord and subsequent neurological damage. A platelet count provides numerical but not qualitative information. Therefore, it is difficult to recommend a platelet count below which regional anaesthesia is contraindicated. The use of bleeding time as a diagnostic test for platelet-related bleeding disorders or as a predictor of abnormal bleeding has not been validated or supported in the literature.

The TEG and sonoclot analysis have been shown to be valuable and reliable in coagulation monitoring and therapy during liver transplantation and in the diagnosis of haemostatic problems after coronary artery bypass surgery.[3,4] These tests have also been used in patients with DIC or fibrinolysis, progressive surgical blood loss and states of hypercoagulation.

The TEG and sonoclot analysis in the parturient are beginning to be evaluated. In this case, the bleeding time, TEG and sonoclot analysis indicated that although the patient had a decrease in platelet number, there was adequate platelet function. This information allowed us to proceed with placement of an epidural catheter for analgesia.

Further examination should be made of the usefulness of TEG and sonoclot analysis in the assessment of the obstetrical patient for the diagnosis treatment of coagulopathies as well as the predictability for haemorrhage in the pregnant woman.

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Effect of clonidine on myocardial ischaemia: a double-blind pilot trial

To the Editor:

Clonidine was proposed to blunt circulatory breakthrough in patients presenting for aortocoronary bypass.[1] We would like to report the results of a pilot study of its effect on pre-cardiopulmonary bypass myocardial ischaemia (Table). After Ethics approval and written informed consent, patients received (1) their routine medications, (2) morphine 100 $\mu g \cdot kg^{-1}$ and scopolamine 0.2–0.4 mg, (3) placebo or clonidine (2.5 $\mu g \cdot kg^{-1}$ *po*) in a double-blind randomized manner. Leads II and V_5 were monitored (Marquette 7000 ST analyser, bandwidth: 0–100 HZ). ST recordings were assessed off line by two independent blinded observers. A down-sloping of the ST segment (<0.1 mV, ≥ 5 min) was considered to indicate ischaemia. Induction of anaesthesia was performed in all patients with sufentanil 1.75 $\mu g \cdot kg^{-1}$, midazolam 30 $\mu g \cdot kg^{-1}$, and pancuronium 100 $\mu g \cdot kg^{-1}$. An air-oxygen mixture maintained $P_{ET}CO_2$ at 35 mmHg. Blood pressure and heart rate (HR) were maintained (±20% of preoperative values) by crystalloid or sufentanil (75 μg)-midazolam (1 mg) increments. Nitroglycerine (1–2 $\mu g \cdot kg^{-1} \cdot min^{-1}$, HR $<$ 110 bpm) or esmolol (1 $mg \cdot kg^{-1}$, HR $<$ 110 bpm) were given, if needed. Student's t test or Wilcoxon-rank test or Chi-square test (Yates correction) or analysis of variance for repeated measures, testing for treatment and time factors, were used where appropriate. Demographic and circulatory (HR, PCWP, CO) data were similar, as were cardiac history and findings. The MAP ($P < 0.07$), the total dose of sufentanil ($P < 0.08$), the mean number of anaesthetic and circulatory adjustments and the mean duration of infusion of vasoactive drugs ($P < 0.01$) showed trends toward lower values in the clonidine group. The cumulative duration of ST changes, summed for each group, was reduced in the clonidine group ($P = 0.0001$). This study presents limitations: (1) Two-lead ECG measurement is only 80% as sensitive as five-lead measurement for ischaemic events. (2) No *post-hoc* validation on each ECG complex during which ST changes are detected was performed. Thus, the incidence of ischaemia in the placebo group (46%) was similar to an earlier study performed with intermittent ECG recordings,[2] but was

TABLE

mean ± SD	*Placebo (n = 13)*		*Clonidine (n = 13)*
Previous myocardial infarction	5	NS	9
Previous PTCA/redo ACBP	3	NS	2
Left main coronary disease	3	NS	1
Hypertension	4	NS	6
Uncontrolled hypertension	1	NS	0
Nitrates	11	NS	11
Beta-blockers	5	NS	8
Calcium entry blockers	8	NS	7
Grafts	3.0 ± 0.48	NS	3.0 ± 0.5
Total dose of sufentanil before cardiopulmonary bypass ($\mu g \cdot kg^{-1}$)	6.43 ± 1.25	$P = 0.08$	5.1 ± 2.19
Patients having received vasoactive agents	12	NS	7
Duration of infusion of vasoactive agents (min)	113 ± 29 (70–165)	$P = 0.10$	80 ± 59 (25–210)
Episodes of tachycardia (>90 bpm, > 3 min)	18	NS	11
Cumulative duration of episodes of tachycardia (min)	345	$P < 0.0001$	135
Episodes of hypertension (SBP>170 mmHg, >3 min)	7	NS	3
Cumulative duration of hypertension (min)	120	$P < 0.0001$	35
Patients presenting at least one episode of ST change	6	NS	3
Intervals* during which ST changes were recorded	12	NS	4
Cumulative duration of ST changes (min)	270	$P = 0.0001$	60
Normalized† duration of ST changes (%, range)	15 ± 32 (0–100)	$P = 0.22$	3 ± (0–28)
Mean duration of ST changes per patient presenting at least one episode of ST change (min)	45 ± 59	NS	20 ± 17
Range of duration of ST changes per patient presenting at least one episode of ST change (min)	5 to 160		5 to 40

PTCA: percutaneous transluminal coronary angioplasty; ACBP: aortocoronary bypass; uncontrolled hypertension: BP > 180 or 110 mmHg at preoperative evaluation vasoactive agents: nitroglycerine, nitroprusside, esmolol.

*Intervals: arrival into operating room (OR) – induction; induction – skin incision; skin incision – sternotomy; sternotomy – cardiopulmonary bypass.

†Ratio of total ischaemic time to the time elapsed between arrival into the OR and cardiopulmonary bypass

higher than in another report,[3] despite the criteria for ST changes. (3) By contrast, a medium-dose narcotic-nitroglycerine-esmolol technique may have reduced the incidence of ischaemia when compared with a high-dose narcotic/anaesthetic technique combined with nitroprusside. Thus, the specific contribution of clonidine itself in preventing ischaemia may be obtunded. (4) The lack of preoperative Holter recordings does not exclude baseline variance for the incidence of ischaemic changes. (5) The dosage of clonidine used was lower than previously employed.[1] (6) A small number of patients were studied. However, since groups were compared in a prospective, double-blind, randomized manner, a meaningful tendency towards a reduction in ischaemia is inferred. Clonidine may have reduced demand and/or supply ischaemia. More thorough evaluation is needed.

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