dyspepsia, even on direct questioning after the second laparotomy.

The use of steroids after microtubal surgery on the Fallopian tubes is widely practised to try to minimise adhesions forming after the operation. The pathogenesis of adhesions, although it has been extensively reviewed,[1] is still unclear and likely to be multifactorial. The evidence from animal experiments suggests that steroids decrease adhesion formation, whether used alone or in combination with antihistamines.[2-4] The few reported trials on humans reinforce this view.[2 5] Others, however, have expressed concern about a possible high morbidity, especially in infants, from gastrointestinal bleeding, wound infection, and wound dehiscence.[6] The experience of most gynaecologists who specialise in tubal surgery, however, is that the incidence of complications is extremely low. We were unable to find any reports of peptic ulcer perforation after such a short course of steroids. We therefore present this case to report a rare and serious complication apparently related to the use of perioperative steroids.

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Letter from . . . Chicago

Gentle Mackinac

GEORGE DUNEA

This summer we spent three days on Mackinac Island, at the junction of the main part of the State of Michigan with its upper peninsula, where the Lakes Huron and Michigan come together under a long suspension bridge. From each side of the bridge small ferries cut swiftly through the northern mist and glide gently into a harbour flanked by white houses with flat grey roofs or steeples shaped like inquisitors' hats. The main street lies behind the landing dock, lined by old-fashioned buildings with awnings overhanging the sidewalk, mostly restaurants and souvenir or candy shops for tourists; and from the harbour other roads fan out into the rest of this small island covered with fine vegetation and colourful flowers. The smell and sound of horses is everywhere, for no cars are allowed to spoil the quaint atmosphere of this island, so that one has to travel in small horse carriages or in larger radio-controlled taxis pulled by teams of powerful horses. A short walk leads to the stately Grand Hotel, whose vast halls and picturesque grounds convey a feeling of old-fashioned elegance, a fitting place for the filming of "Somewhere in Time." In the evening the auto-dealers of Michigan had a banquet on this *carless* island and we all watched this romantic story of a playwright who travelled back in time to 1912, here on Mackinac, and amidst the Edwardian elegance of that time met the most beautiful woman he had ever dreamed of. Then the next day we went around the island in a carriage pulled by an old horse that knew the way and automatically trotted along, stopping periodically to rest and frothing alarmingly at the mouth as though about to develop pulmonary oedema.

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Wasteland of recall

In the afternoon I sat by the lake, looking at the ducks and the ugly gull-like birds with strangely curved necks, and sorting out my clippings for the next Letter. Then the pretty waitress —closest approach to romantic 1912—brought a drink and asked what I was writing, for she was going to college herself, taking French and *communications* at Ann Arbor, and hoping to write a book of poems some day. Later, getting tired of my file, I began to read *Gentle Vengeance*,[1] the story of a freshman in medical school at Harvard, and also *Talking Medicine*,[2] a collection of recorded interviews with people in various stages of becoming or being doctors. And I was reminded, at the distance of almost three decades, of much of the unpleasantness of medical school, which appears to have changed but little despite an intercurrent interlude of campus activism and student protest.

It is still all there, it seems: the fear, the competition, the smart students asking too clever questions and showing off by quoting the journals, the learning by rote, the obscene mnemonics, the skipping of lectures to go home and swot for exams, the flying rumours, the dry lecturing on seemingly irrelevant material, the endless metabolic pathways, and the exclusion of all humanistic or liberal subjects. Perhaps this was less resented at 19 than at

34, the age when LeBaron entered medicine as a literature major with little background in the sciences—so that it did not take him long to find out that his Idiot Savant, a mentally retarded boy with a photogenic memory who could memorise whole telephone books, would have done much better than he in that "wasteland of recall" that was first-year medicine.

So reading *Gentle Vengeance* brings back memories, not only of the ligature slipping off the artery in physiology class and of the dog unaccountably waking up during the experiment, but also how one's whole life becomes subordinated to the main purpose of passing exams, and how one comes to be possessed by that compulsion to study that may never leave one again. Yet at Harvard, as in other schools, hardly anyone ever failed, and there were not even numerical grades, just "pass or fail," yet nobody had time for anything but study. As a result, students of widely diverse cultural and educational backgrounds become distressingly stereotyped, like their lecturers speaking *technicalese*, and unable to explain things to people who did not know the subject already. Soon, also, they are perceived as well on the way to becoming "callous, selfish, and conservative," especially by the younger idealistic new students, who of course know that *they* will be so very different and so much better. Yet, "to see students arrive all full of ideas and freshness, and then each year become progressively homogeneous, as if to fit some unseen mould," muses one of the professors, "is it something we do to them, or something they do to themselves?"[2]

At Harvard, as in other prestigious institutions, most lecturers are not employed by the university but are supported by government grants, for which they have laboured long and hard. Under these circumstances teaching becomes a side-line, often an unwelcome distracting influence, and, while the students wonder why they are never taught by doctors who have practised medicine, the lecturers too may adapt their courses to suit the requirements of "pre-med" education, teaching facts but rarely letting the students see the larger picture. Thus it was not until the very end of the course that the biochemistry professor alluded to the real aesthetic reason for studying the life's processes, with its various cycles interlocking in a web of inconceivable beauty, giving a sense of location in the midst of loneliness and of repose in the midst of chaos. Yet how could someone see all this beauty, reflects LeBaron, and dare to defile it by teaching it this way.[1]

And why shouldn't a freshman take time off from studying lists to learn about some of the theories held about the beginning of life? For it may be that billions of years ago blasts of ultraviolet solar energy caused carbon atoms to combine into stable long chains, gradually lengthening themselves by ripping off molecular spare parts from other chains, until the survivors found it expedient to protect themselves by encasing themselves with what became cell membranes. Then, by combining themselves into groups, and later by differentiating themselves for specialised functions, such cells evolved into "living" organism.

But for the greater part such side trips are not to be undertaken without considerable risk to survival. Which reminds me of our own botany course, when everybody passed who could list the differences between monocotyledons and dicotyledons, except for the one student who, taking a liking to the subject, read the whole botany book and predictably failed the exam. And those who may have cried after struggling for a day with a stingray's nervous system that had been steeped in formalin, or hacked their way to the pelvic bone without ever seeing the posterior cutaneous nerve of the thigh, will no doubt feel sympathy for the first-year hazing described so well in these books.

But at least in those days entering medical school was easy, far from the tour de force described by the modern students.[2] One did not have to know the politics of applying to many schools, of dressing up one's application, of pretending to be a Renaissance man as well as a scientist, nor did one end up $50 000 in debt when all was done. Perhaps we may agree then with LeBaron that it is all a very roundabout way to buy that shining red car. We may also enjoy his description of the liberal students being co-opted by the Establishment as they are put on various school committees, given prominent positions, and have the feeling of power dangled before their noses. And before leaving *Gentle Vengeance* we may also view the world from the trenches, from the bottom of the hospital where the aides and nurses and social workers fight the war unaided, for prestigious schools train generals, who fight on the Right wing, or "fashionably on the Left," but never in the trenches.[1]

Alexis St Martin's stomach

So we return to Mackinac and its fort with the white stone walls, its cannons still guarding the approach to the bay. Founded by the British exactly 200 years ago, Fort Mackinac stands 35 m above water and is reached by a walk lined with hollyhock, offering a view of houses with lawns extending to the lake's edge, a small flotilla of colourful sailing boats in the harbour, several neighbouring islands, and the bridge in the distance. The fort was garrisoned by the United States Army in 1796; but in 1812 the news travelled so slowly that the garrison did not know about the war until it was suddenly outnumbered by an expeditionary force that had quietly disembarked at what is now known as British Landing Place. The United States regained the fort in 1815, and it is now operated by the State of Michigan as a museum. Visitors may watch cannon and musket firing and go into the various buildings, including the little hospital where in 1822 took place some of the most famous experiments in gastric physiology.

For it was here on Mackinac that Dr William Beaumont practised for five years as the fort's surgeon, having been "willingly recommended" in 1812 by the Third Medical Society of the State of Vermont "as a judicious and safe practitioner in the different avocations of the medical profession." Being the only doctor on the island, he requested the right to engage also in private practice, though not for "any pecuneary [sic] notion." He visited the sick, vaccinated children against smallpox, bled people for various ailments, tapped abdomens distended by ascites, and even trephined skulls for intracranial haematoma. Also practising horticulture, he grew opium and nourishing plants, and prescribed camphorated Aq Amon Acet and other remedies that he must have studied with the same application as LeBaron did at Harvard some 150 years later.

Then, on 6 June 1822, a musket discharged accidentally its duck shot, injuring in the left hypochondrium a swarthy young French Canadian voyageur named Alexis St Martin. The good doctor rushed to the scene, stopped the bleeding, dressed the wound, and treated the pneumonia with poultices, but for the first 15 days the food kept on coming out through the wound, so that the patient had to be sustained with "nutritious injections given per anus." Later, the doctor applied adhesive strapping to compress the wound, which healed leaving a hole, eventually giving Dr Beaumont the idea of studying gastric digestion, especially when the council refused to continue paying for St Martin, so that the doctor had to treat him in his own house at his own expense. In the succeeding years William Beaumont peered into St Martin's stomach, syphoning out fluids and retrieving food particles with a spoon or suspending pieces of meat on a string to find out how long digestion took. Eventually St Martin tired of being an experimental subject but not before William Beaumont had established beyond doubt that gastric juice was an acid and that digestion was neither fermentation nor putrefaction, nor the cooking or incineration of food, as Hippocrates had stated some 2500 years ago.

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