In *Undue Risk*, Jonathan D. Moreno, Director of the Center for Biomedical Ethics at the University of Virginia and a former member of President Clinton’s Advisory Committee on Human Radiation Experiments, presents a comprehensive overview of the controversial and often secret use of human experimental subjects to serve the interests of national security. The book is an insightful and provocative inquiry into the unfortunate inclination of modern governments to test chemical, biological and atomic weapons on their own citizens, often without their knowledge. Moreno’s account primarily involves American cases, but experiments conducted in other countries, including Canada, are also discussed. Although each chapter deals with a different set of experiments, the author weaves these studies together into a seamless account that is well-organized and fascinating to read.

Moreno draws on example after example, ranging from Nuremberg to the Gulf War, to make the case that governments invariably tend to favour the interests of national security over the rights of individual citizens, particularly during times of war or political instability. The experiments he discusses include studies involving exposure to biological and chemical toxins, as well as the deliberate exposure of unsuspecting military personnel and even disabled children to nuclear radiation. Other experiments involved secret LSD and mescaline administration to unprepared and unsuspecting subjects with a view to determining the potential value of these substances in temporarily disabling enemy soldiers. Still others involved CIA-funded “brainwashing” experiments conducted at McGill University in the 1950s by psychiatrist Ewen Cameron. Moreno also cites a variety of contentious US government policies that permitted such a state of affairs, including the attempted recruitment of Nazi medical scientists after World War II.

The historical catalogue Moreno meticulously assembles in *Undue Risk* amply supports his argument that the rights of many thousands of human experimental subjects were ignored in attempts by medical scientists to acquire new knowledge of potential military and national security importance. He makes the case that many of these experiments occurred even after the development of a code of ethics for medical experimentation by the American Medical Association and the even more celebrated Nuremberg code of ethics, the first principle of which begins with the assertion, “The voluntary consent of the human subject is absolutely essential.”

One appealing facet of the book is the many interesting tangents it takes, such as the evolution of various codes...
of research ethics after the Nuremberg trials, and the poignant story of the “evil genius” Nathan Leopold, who, struck by a patriotic desire to do his bit for the war effort during World War II, volunteered to be a test subject for anti-malarial drugs while he was incarcerated for the cold and calculated murder of a 14-year-old boy.

Those who feel that human rights and the Nuremberg Code should be held above concerns of national security will be outraged by the experiments chronicled in this work. Others who recognize that the development of effective treatments for injuries sustained in unconventional warfare requires some use of experimental human subjects will still be challenged to defend the ethical propriety of many of the experiments Moreno discusses. Regardless, Moreno’s book is an effective means to stir debate on the ethical issues involved in experimentation involving human subjects.

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Toronto, Ont.

Room for a view

Scans

May ... MRI this morning, observing. A newborn baby with a mass blocking his nose. One tiny baby, with entourage of technicians, nurses, paramedics filling the room overlooking the MRI. An impatient, even imperious, entourage; when they want their questions answered, their questions must be answered. All the time the baby is inside, his heart rate traces green peaks on the monitor and the rough, quick little whisper of his breathing carries through the intercom. The scan ends, the table is drawn out, three people in blue slowly unwrap a tiny package in dustier blue. A nurse lifts the baby and holds him in outstretched hands, like a gem on a cushion, one hand cupping the little pink head. She carries him thus through the metal detector arch, seemingly oblivious to the scrambling behind her as the two others snatch up all the dangling tubing and wires before they snap taut.

On the scans, the imminent end of another life. The tumour and the surgery and the radiation and the chemotherapy have hollowed out the left hemisphere. The tumour is a bright, thick, ragged edge around a great cavity. No level of scan, no single layer, is spared. The neurologist describes the patient as asphasic and crazy. The family, he says, is taking him around the continent, looking for a cure; he comes accompanied by MRIs and CTs from all over, recording the inexorable progression. Our neurologist thinks that the referring neurologist has prevaricated, has said maybe/maybe not, has not said finally that there is nothing else he can do. He himself would not touch this, not in a dominant hemisphere. So he will send this man home.

Will he — will anyone — finally say to this family that it is time to stop?

September ... I have been thinking off and on of two people I shall never meet. Should I put their names here — perhaps not — but I do not leave them nameless because I think of them that way. One a woman younger than myself, thrown from her car when side-rammed at 65 k/h, comatose (Glasgow Coma Score 4) with roving eyes and decerebrate posturing. The CT scan shows very little, in her head at least. She has a fractured first vertebra, umpteen spinous processes destroyed. The radiologist remarks on the inadequacy of the scan, which has the signature of one particular, indifferent technician. The head scan, with no visible abnormalities, does not account for the score, no level of scan, no single layer, is spared. The neurologist describes the patient as asphasic and crazy. The family, he says, is taking him around the continent, looking for a cure; he comes accompanied by MRIs and CTs from all over, recording the inexorable progression. Our neurologist thinks that the referring neurologist has prevaricated, has said maybe/maybe not, has not said finally that there is nothing else he can do. He himself would not touch this, not in a dominant hemisphere. So he will send this man home. Will he — will anyone — finally say to this family that it is time to stop?

Small consolation

He stares like so many dreams
Cast in the depth of space.

“Will I get better doctor?
Will I return to normal human being?”

I am only a medical student.
He will teach me for an hour.

A classic temporal lobe brain tumour:
He cannot remember my name for minutes
But he knows he’ll be operated on tomorrow.
It’s engraved there, etched so strongly by fear.
It remains his only hope.

“That’s what your doctor says, isn’t it?” I reply,
Knowing his doctor can know no more than I.
Statistics are always a prayer or a curse.

William Hay
Psychiatrist
Vancouver, BC

Fred Sebastian
‘He stares like so many dreams
Cast in the depth of space.

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