Every cell is sacred

Somewhere on the Campaign Trail, September 2036—In the first decades of this century, the ‘pro-life’ movement scored a notable string of political successes in restricting, and then finally banning, the use of human stem cells for research or therapy. As a result, medical advances, which have enormously improved the lives of citizens in most other countries remain unavailable here in the USA, except to the small minority rich enough to travel abroad for treatment. Patients who do so, as well as their families, typically need to incur huge additional expenses to create cover stories or fight legal battles, following the passage of the constitutional amendment outlawing medical tourism. Indices of life expectancy and life quality in Europe, Asia and Africa now exceed our own, even in countries once considered to be ‘basket-cases’ of under-development and political corruption. The enlightened policies that have enabled those countries to restrain population growth and provide for the health and welfare of their citizens are also sadly absent here at home.

The upcoming presidential election campaign theoretically provides an opportunity to reverse some of the more egregious medical legislation of recent decades, and start to rebuild our lost prosperity. Thus, it is all the more depressing that both major parties have nominated candidates not only wedded to the mistakes of the past, but who have embraced further moves that could gravely impair the health of our citizens. The recent emergence of splinter groups, such as the Doctors’ Party or the ironically titled Anti-Life League, offers little hope for change. They cannot compete for funding with the mainstream parties, who enjoy the strong support of domestic corporations, whose interests are threatened by any suggestion that we might adopt therapies developed abroad. The ability of fringe parties to promote alternative visions

of health care has also been severely restricted by the passage of the fourth ‘Right-to-Life Amendment’.

We are faced with a choice between platforms that are ‘extreme’ and ‘extremes’, and virtually indistinguishable in effect. Whereas the one is couched in phraseology overtly borrowed from ecclesiastical texts that should have no place in modern politics, the other employs even more preposterous language, invoking our historic attachment to fundamental freedoms to justify further major restrictions on liberty. Despite the legal minefield we are entering even to pass comment on this sorry state of affairs, we feel obliged to speak out against the proposed imposition of laws that could return us to the Middle Ages.

In 2036 we already face a complete ban on the use of stem cells, whether naturally occurring or engineered by any means, on the grounds that they have the potential to develop into a complete human being, and are thus constitutionally protected. The sale or use of any product derived from research using stem cells has accordingly been prohibited for almost 20 years. Now it is proposed that we must regard even cancer stem cells in the same light. Since it is technically possible to edit their genetic abnormalities and return them to a pristine condition equivalent to embryonic stem cells, they could theoretically be used to circumvent the current ban. In order to prevent this, it is planned to confer on them the same status as a healthy stem cell derived by any other means.

The absurd implication is that cancer treatments that could lead to the death of cancer stem cells might need to be halted, even though the actual use of genetic therapies that would restore cancer stem cells to normality is itself prohibited because of the universal ban on human genetic engineering. Future cancer patients might therefore have to rely upon palliative treatments alone, even though the means to

cure them of a fatal disease are now widely deployed across almost the entire world, in many cases based on discoveries from our own scientists. Even basic surgery might be precluded in such cases. Those on the religious right who campaigned for years to place the health of an unborn fetus, then that of a one-cell embryo, above that of its mother, now lust for a further victory that seemingly places the rights of a tumour above—or at least equal to—those of the patient whom it afflicts.

The ‘opposing’ party platform goes even further, by seeking to endow all human cells with such rights, based on the ‘personhood’ concept, now enshrined by law in almost all states. This would mean that any drug or other medical treatment produced or validated through the use of cultured human cells could be subject to the same restrictions as currently apply to stem-cell-based therapies. Moreover, almost all basic research employing human cells would defy such legislation. Since genetic engineering could, in theory, be used to edit the genome of say a mouse cell *ad infinitum* until it was, genetically speaking, a human cell, scientists might find even their use of animal cell cultures farcically challenged in the courts.

We cannot afford to fall even further behind the rest of humanity in applying scientific knowledge to the pressing medical and societal issues that confront us. Our laws are increasingly dictated by theological principles that are disputed even by the adherents of the religions that they purport to represent, and by a canon of constitutional edicts that has itself assumed the status of a sacred text. The republic that was supposed to promote the general welfare of its citizens and secure the blessings of liberty for posterity, seems to have become but a distant memory.

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