## Donor sperm for intracytoplasmic sperm injection

Sir—In Austria, the Reproductive Medicine Act of 1992 clearly stipulates that intracytoplasmic sperm injection (ICSI) is permitted only with the spermatozoa of the husband or living partner. The legal provisions in Germany are similar, whereas other countries (eg, the USA, Italy, and Belgium) foresee the possibility of use of donor spermatozoa. A complaint for unequal treatment filed by a female patient (because donor sperm is permitted for insemination in Austria) was recently rejected by the Austrian Supreme Court.

In October, 2000, we were notified by a colleague that the Department of the Women's General Hospital Linz was soon to expect a request for ICSI from a couple who had wanted a child for 5 years. The most recent spermiogram had shown only minor pathology. The colleague reported, however, that an earlier spermiogram in 1995 had shown definite azoospermia that had been classified as untreatable. The husband had at that time inquired about the cost of donor ICSI in Belgium.

The treating urologist told us the patient had attributed the change in pathology to the use of homoeopathic therapy and that he was suspicious that the improved substrate had not been provided by the patient himself.

The couple presented at our for Department the agreed consultation on ICSI. The situation proved rather difficult. We had to assume that the husband would deny having intentionally exchanged the sperm sample, but to ask him to provide a new sperm sample under observation was impossible. We decided to directly confront the husband without blaming him of any illegal action. The couple again claimed that homoeopathic therapy must have improved the sperm quality. As a compromise, we suggested that another sperm sample be provided at a new appointment that we would subject to a genetic compatibility test with the blood of the husband. The husband accepted this proposal, but did not attend the next appointment.

Such use of donor sperm in countries where donor sperm is prohibited is probably being attempted and done in occasional instances. In our case, only our patient having consulted the same urologist twice helped us to discover this substitution attempt. If patients change urologists or gynaecologists and take fresh samples of donor sperm for each preliminary examination and for ICSI, use of donor sperm will be almost impossible to avoid.

The only safe way out of this dilemma is to do genetic analyses of sperm and blood, which certainly seems unfeasible given the costs involved. However, such an approach should be considered if unexplained improvements are noted.

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## Impact factor to assess academic output

Sir—Bibliometeric analyses are a useful way to assess academic output. Emphasis is commonly placed on impact factor—ie, the measure of how frequently reports in a given journal are cited. Proponents and opponents continue to have heated discussions on this topic.

The journals with the highest impact factors in each field are an attractive target for many workers. Aficionados interpret the study of impact factors as a relevant assessment of the state of affairs in the different branches of medicine. Sometimes the results of such comparisons are, however, surprising, such as the difference between immunology journals (maximum impact factor 37.796) and those for rheumatology (6167.0). The development of immunology has meant that rheumatology might be seen as a practical form of immunology, and the difference in bibliometric weighting is therefore not easily understood.

Many complex factors play a part in the citation intensity of a given journal, such as quality, circulation, and accessibility, and much attention has been devoted to these factors. One obvious factor has, however, been missed: the opportunity for citation. To assess this feature at random, we studied an ISI Journal Citation Report (JCR) more closely. We investigated the impact factors for the top journals in the different specialties, as defined by the ISI JCR, 1997. The number of journals in each specialty correlated significantly with the top impact factor achieved (Spearman's rank correlation r=0.7692 [95% CI 0.5211-0.8974], p < 0.0001). When we assessed only dermatology journals, we noted a similar correlation for top and mean impact factors for the period 1991–2000.

This finding suggests that the number of journals per specialty is a strong confounding factor in the determination of traditional or basic impact factors. The difference in the number of journals (117 vs 18) might, therefore, alter basic impact factors, for example for immunology and rheumatology disproportionately.

To assess this effect, we calculated weighted impact factors by dividing basic impact factors by the number of journals in the specialty. Differences between specialties are not fully accounted for, but the weighted impact factors of clinically related specialties seem more similar for basic impact factors. Weighted impact factors, therefore, seem to offer a more appropriate measure for comparisons than do basic impact factors.

Top journals should welcome and encourage new publishers, since more journals means a higher top basic impact factor.

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## Potentiators and bolus intravenous furosemide

Sir—Furosemide, the most commonly available loop diuretic has been widely used for several therapeutic and diagnostic indications in medicine since its introduction in the 1960s. The drug's potential to induce tinnitus or deafness was recognised early, especially if given by rapid intravenous bolus.

Heidland and Wigand<sup>1</sup> advocated that this adverse effect can be avoided by restriction of the rate of injection to less than 4.0 mg/min. Nevertheless, furosemide has been administered routinely during radionuclide diuretic renography as a rapid intravenous bolus in doses of 0.5-1.0 mg/kg (up to a maximum of 20.0-40.0 mg), in tens of thousands of cases since the late 1970s. In our hospital alone, the largest paediatric hospital in Australia, we estimate that there have been 10 000 administrations during routine DTPA or MAG<sub>3</sub> diuretic renography since 1984, apparently without incident. Other paediatric nuclear medicine physicians report similar experiences.

Diuretic renography has an important role in the assessment of dilatated renal tracts and obstructive

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