Dear colleagues, welcome to issue 2 of volume 16 of the journal. The feedback from our first 60-page volume, 16:1, has been very positive and really encourages us to push even further forward with page count, and even with an increase in the number of issues per year from the current quarterly appearance of the journal to a possible 6 issues per volume. This is very easy for us to say, but we will only be able to accomplish it if we keep receiving enough papers, not only just to maintain our page count, but of the requisite high standard to satisfy the requirements of both our panel of peer reviewers, and the strict guidelines laid down by Medline, to which as you know we have applied for inclusion in the Medline indexing service. Please, therefore, consider Laser Therapy first as the forum in which you can publish your articles.

The main point I should like to make in this Editorial is that all laser surgery depends for its good effects compared with conventional surgical approaches on the fact that light energy is the surgical tool being used. As I have reported before (Ohshiro T (2005): Auto-simultaneous laser treatment. Laser Therapy, 14: 11-17.), my classification of laser medical application by the effect of the intervention in tissue contains the very important subset of ‘autosimultaneous laser treatment’: basically this refers to the athermal and atraumatic photobioactivative effect in cells at the very periphery of a surgical laser impact brought about by the low photon intensities in this zone, the majority of the photon energy having been dedicated to the photosurgical effects, such as vaporization, coagulation and protein denaturation. Without the direct athermal and atraumatic photon-cell energy exchange which occurs in the outermost zone affected by the incident photons, Laser surgery would not have the excellent and interesting results that it does. A good example of this is the paper in the present issue by Doanh and Khang on the use of the CO2 laser for removal of condyloma acuminatea is a very good example of the type of paper we will always be very happy to accept: at face value, it is a purely surgical paper, but as the authors point out in the Discussion section, it is the events occurring at the periphery of the destructive surgical beam which give this procedure its high success rate and less postoperative pain but with robust follow-ups and no recurrence. We at Laser Therapy will welcome all surgical laser papers for consideration, always provided there is some discussion of the importance of autosimultaneous laser treatment to the final good effect.

Regarding preparing your article for submission to the journal, in my Editorial to 16:1 I outlined the necessary very comprehensive parametric-based approach in order to allow others to duplicate your study, and to satisfy the criteria demanded by the journal’s peer reviewers. I would like in this Editorial to offer some hints on the actual organization of the paper data. (The following is extracted from Calderhead RG [2003]: Preparation of a scientific paper on clinical laser research or applications: pitfalls and how to avoid them. In Laser Florence 2002, SPIE proceedings, 5287: 7)

“*For in vitro studies, please give details on how the cells were cultured, counted and handled. Any special processes, for example genetic splicing, polymerase chain reaction (PCR) techniques or immunohistochemical assays such as Northern or Western blotting should be given in detail, although this can be somewhat shortened if a technique used in a previously published paper is referenced. The division of the cells into different groups will usually be detailed here, including (it is hoped) one or more control groups. Details of how the cells were irradiated should then be given, and a concise description of the preparation of the cells for the final viewing techniques.

In vitro studies usually proceed from the section on the laser or lasers straight to the detail of what was done to the animals or human subjects to help answer the originally-stated problem. For animals, the way the animals were handled and irradiated should be described in enough detail to allow others to repeat your experiment or treatment technique exactly. A diagramme showing the irradiated point or points is helpful. The treatment regimen should be described, and details of how the control animals were handled is
very important. Particularly in the case of laser therapy experiments, please note that the control group must be a separate set of unirradiated animals. Unirradiated ‘controls’ contralateral to the irradiated site or sites on the same animal will seriously flaw a study, as the systemic effects of laser therapy have been well proved, and a contralateral unirradiated control wound, for example, will still eventually receive the benefits of the irradiated side in the form of systemically blood- or lymphatic borne photoproducts. The spontaneous healing of unirradiated torpid ulcers on limbs contralateral to the laser-treated ulcers, for example, has been reported from as long ago as Endre Mester’s human studies in the late 60’s and early 70’s. For wound healing studies, the measurement methods should be provided, for example goniometry, tracing of photographic images or digitalized viewing. If the animals are to be killed, or as many authors euphemistically say, ‘sacrificed’, as part of the experiment, details of how that was done and when should be given, and, if appropriate, how the tissue samples were collected, treated and prepared for staining and viewing.

For human subject trials, the treatment regimen should be provided, giving details of laser irradiation, total treatment times per session if appropriate, and the number and frequency of sessions. If there is a cross-over element in the trial, it should be explained here. Any pre- or post-treatment techniques are important, for example prophylactic anti-herpes drugs, and wound or tissue management with dressing techniques, creams or ointments. Follow-up periods and assessments should be detailed. In the case of laser therapy pain studies, the pain assessment methods, for example the visual analogue scale (VAS) or pain relief scale (PRS) should be given. The difference between these methods is that the VAS starting score depends on the patient’s perception, whereas the PRS always starts at 10, and the patient is asked to report how much their pain has improved after the session. For this reason, it is good to use the VAS at the first session, and the PRS thereafter. The Japan Laser Therapy Association has suggested this as the gold standard in subjective assessment. If efficacy of the treatment is to be assessed, a five grade satisfaction index (SI) is a good way of recording this, with patients asked to rate their satisfaction as extremely satisfied, very satisfied, fairly satisfied, no change and dissatisfied. If the scores for the extremely and very satisfied grades are added, ignoring the other three, this will give the overall satisfaction index while helping to deskew the data due to the placebo effect.

If histology is an issue, describe how biopsies were taken, and how the specimens were handled and prepared for viewing. Objective, blinded and independent assessment of the histological findings will give these data more credibility. Clinical photographic techniques are important, and should be explained. Standardization of patient photography is extremely necessary, and a high resolution digital camera is very helpful here. Some models use mini-cd-ROM disks or even DVDs, which means that the pictures for each patient can be kept and sequentially archived on their own disk and stored in their records. Objective assessment of the clinical photography by an independent blinded group of experts will go a long way to helping your paper be accepted. Finally, if the data are to be subjected to statistical analysis, give the tests used and the p level set for significance.

If you follow these guidelines, and include the parametric data mentioned in editorial to 16:1, you are already well on the road to having your paper accepted by the journal. Get writing!!!

Toshio Ohshiro
Tokyo, May 2007