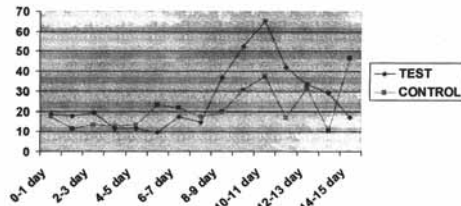


Table 2: Percentage difference in Healing

Days	Test	Control	Days	Test	Control
0-3	2.60%	2.36%	9-12	0.86%	0.77%
3-6	0.90%	1.70%	12-15	0.04%	0.28%
6-9	1.19%	1.11%	Mean	1.118	1.244
			S.D.	0.93	0.81

**Fig 3: Rate of decrease in area compared with previous day area**

DISCUSSION

Indirect evidences suggest that PMF therapy could augment peripheral blood flow via reflex vasodilation following epigastric in normal subjects³. However there have been no direct measurements of PMF effect on blood flow at the site of application which ultimately would be a target of potential wound healing interventions⁴. Less consistent results have been reported in investigations of the direct effect of magnetic energy on cutaneous blood flow. Miura and Okada showed that the arterioles of frog's webs dilate on response to pulsed electromagnetic radiation. This effect was shown to be independent of heat and was postulated to involve the modulation of calcium balance in vascular smooth muscle cells⁵.

The wound contracts owing to the vaso-elastic properties. A wound of say five cm diameter can close completely by the contraction property. This depends on the growth of blood vessels and tissue into the contracting margin of the wound. Exposing the wound to PMF of low frequency and intensity quickens the wound healing⁶. The modes of action of PMF said to be

1. Vaso-dilatation by increasing the local blood supply which accelerates the vasodilatation process⁷.
2. Increasing the oxygen supply to the tissues and helpful to control infection as well as increasing the local metabolism⁸.

In the present pilot experiment as indicated graphically in fig IV the test group animals as the wound undergoing PMF throughout is showing although not significant a quicker rate of healing. It can also be noted that from 9th day the healing rate variation of test animals become marked as seen in fig IV.

CONCLUSION

We have found that wounds of animals which had PMF therapy healed faster than those which was left to natural process, which was the control group. Whether PMF could be an effective adjunct in quickening the healing processes of the wound could be reconfirmed by taking more number of animals and subjecting them to bigger wounds instead of 1cm diameter.

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LITERATURE REVIEW

Short-term Outcomes of Induction Therapy With Tacrolimus Versus Cyclophosphamide for Active Lupus Nephritis: A Multicenter Randomized Clinical Trial.

Wei Chen, Xueqing Tang, Qinghua Liu, et al. *American Journal of Kidney Diseases, Volume 57,(2):235-244, 2011*

Intravenous cyclophosphamide with prednisone is an effective treatment for lupus nephritis, but with significant toxicities. We compared the efficacy and safety of tacrolimus versus intravenous cyclophosphamide as induction therapy. Multicenter randomized controlled trial, analysis data on 81 patients with biopsy-proven lupus nephritis from 9 nephrology centers in China from 2006-2008. patients were treated with Prednisone and either tacrolimus (n = 42) or intravenous cyclophosphamide (n = 39) for 6 months. Tacrolimus was started at 0.05 mg/kg/d and titrated to achieve a trough blood concentration of 5-10 ng/mL. Intravenous cyclophosphamide was initiated at 750 mg/m² of body surface area, then adjusted to 500-1,000 mg/m² every 4 weeks for a total of 6 pulse treatments. The primary outcome was complete remission (proteinuria with protein excretion <0.3 g/24 h, serum albumin ≥3.5 g/dL, normal urinary sediment, and normal or stable serum creatinine level) at 6 months. Response (complete or partial remission), clinical parameters, and adverse effects were secondary end points. After the 6-month induction therapy, the tacrolimus group achieved higher cumulative probabilities of complete remission and response (52.4% vs 38.5% and 90.5% vs 82.1%, respectively) than the intravenous cyclophosphamide group, but differences were not statistically significant (log-rank test, P = 0.2 and P = 0.7, respectively). Proteinuria (log-transformed) was significantly decreased in tacrolimus- versus intravenous cyclophosphamide-treated patients after the first month of treatment, even with adjustment for baseline proteinuria (protein excretion, 0.01 vs 0.23 g/d; P = 0.02). After treatment, serum creatinine levels and estimated glomerular filtration rates were not significantly different between treatment groups. Adverse effects, such as leukopenia and gastrointestinal symptoms, were less frequent in the tacrolimus group. **Conclusions:** In conjunction with prednisone, induction therapy with tacrolimus is at least as efficacious as intravenous cyclophosphamide and prednisone in producing complete remission of lupus nephritis and has a more favorable safety profile.

LITERATURE REVIEW

Mortality and cardiovascular risk associated with different insulin secretagogues compared with metformin in type 2 diabetes, with or without a previous myocardial infarction: a nationwide study.

Tina Ken Schramm, Gunnar Hilmar Gislason, Allan Vaag et al. *European Heart Journal* 2011, 10, page 1093

The impact of insulin secretagogues (ISs) on long-term major clinical outcomes in type 2 diabetes remains unclear. Authors examined mortality and cardiovascular risk associated with all available insulin secretagogues compared with metformin in a nationwide study in patients of type II diabetes. All Danish residents >20 years, initiating single-agent ISs or metformin between 1997 and 2006 were followed for up to 9 years (median 3.3 years) by individual-level linkage of nationwide registers. All-cause mortality, cardiovascular mortality, and the composite of myocardial infarction (MI), stroke, and cardiovascular mortality associated with individual ISs were investigated in patients with or without previous MI by multivariable Cox proportional-hazard analyses including propensity analyses. A total of 107 806 subjects were included, of whom 9607 had previous MI. Compared with metformin, glimepiride (hazard ratios and 95% confidence intervals): 1.32 (1.24-1.40), glibenclamide: 1.19 (1.11-1.28), glipizide: 1.27 (1.17-1.38), and tolbutamide: 1.28 (1.17-1.39) were associated with increased all-cause mortality in patients without previous MI. The corresponding results for patients with previous MI were as follows: glimepiride: 1.30 (1.11-1.44), glibenclamide: 1.47 (1.22-1.76), glipizide: 1.53 (1.23-1.89), and tolbutamide: 1.47 (1.17-1.84). Results for gliclazide [1.05 (0.94-1.16) and 0.90 (0.68-1.20)] and repaglinide and [0.97 (0.81-1.15) and 1.29 (0.86-1.94)] were not statistically different from metformin in both patients without and with previous MI, respectively. Results were similar for cardiovascular mortality and for the composite endpoint. **Conclusion** Monotherapy with the most used ISs, including glimepiride, glibenclamide, glipizide, and tolbutamide, seems to be associated with increased mortality and cardiovascular risk compared with metformin. Gliclazide and repaglinide appear to be associated with a lower risk than other ISs.