A DISSERTATION

on

STEFAN GRAVITATION

by

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The contents of this dissertation follow in the order below:

1. Introduction.
2. Requirements of Regulation 6 of the Degree of Doctor of Medicine.
3. Historical review — before 1900.
   1900 — 1949
4. The hypothesis with suggestive clinical evidence.
5. The method of study.
7. Histological section.
8. Results of the study.
9. Local tissue reactions to steroids.
10. Conclusion.
11. List of references.
12. Appendices.
This dissertation on Striae Gravidarum reviews the world literature to the present day and as a consequence emphasizes the scarcity of detailed knowledge on this subject.

A clinical study is presented with evidence refuting the generally accepted stretch theory of etiology. The suggestion, with supporting evidence, is made that their etiology is intimately related to adrenal cortical hyperfunction.

Tissue study findings of numerous biopsies are presented and evidence is shown by illustrations that there is little if any tearing of either the elastic tissue fibres or the collagen bundles. Ground substance changes with consequent rearrangement of the supporting tissue is suggested as the underlying tissue change in striae.

The detailed recording of clinical signs during pregnancy allow many cross relationships, such as concern acne, past and present, obesity past and present, toxemia, complexion and even family tendencies towards diabetes and hypertension to be studied in relation to striae gravidarum.

A review of present day knowledge of local tissue reactions to steroids is presented together with references to the topical application of hydrocortisone in pregnancy in six cases in this series and mast cell variations in the skin of Wistar rats both pregnant and non-pregnant. Reference is made to mast cell changes in human pregnant skin.

This comprehensive review of the subject of striae gravidarum produces strong evidence for an alteration in the present day conception of their etiology.