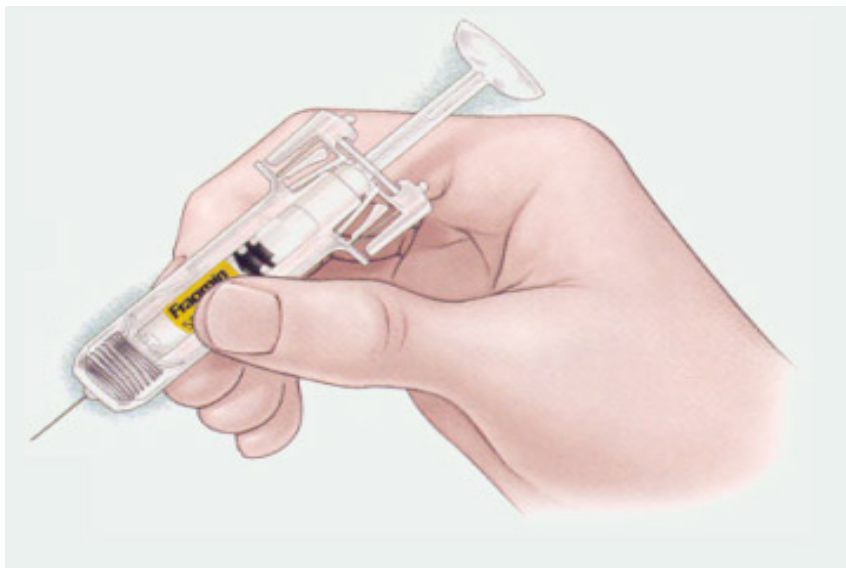


Selbstmanagement Heparintherapie

Compliance bei der Selbstinjektion von
niedermolekularen Heparinen in der ambulanten
Behandlung

Studienarm „daily life setting“



Masterarbeit von Raphaela v. Grünigen

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betreut von:

Seraina Mengiardi
eidg. dipl. pharm.

Kurt Hersberger
PD Dr. sc. nat.

INSTITUT FÜR KLINISCHE PHARMAZIE
Pharmaceutical Care Research Group
Departement Pharmazie der Universität Basel
Klingelbergstr. 50
CH – 4056 Basel



Selbstmanagement Heparintherapie - Compliance bei der Selbstinjektion von niedermolekularen Heparinen in der ambulanten Behandlung. Studienarm „daily life setting“.

Background

Outpatient subcutaneous therapies are getting more and more common for the treatment of different diseases (e.g. multiple sclerosis, arthritis, anemia, female infertility). For prophylaxis and treatment of thromboembolism, low molecular weight heparins (LMWH) are frequently used. But, the few available data on drug use problems and compliance with LMWH in the ambulatory care show that subcutaneous self-administration of heparins pose significant problems. The project „Self-management of heparin therapy – drug use problems and compliance with self-injected low molecular weight heparin in ambulatory care“ is divided into a “clinical setting” and a “daily life setting” arm. This master thesis contributed to the “daily life setting” arm. Aims of this study arm are: Recording of application problems including compliance of outpatients self-injecting LMWH. Investigation, if the interventions developed in the “clinical setting” arm are feasible in community pharmacies. The purpose of the master thesis was assistance in development and organisation of the “daily life setting” arm. The following aims were defined for the master thesis: Validation of measuring instruments, recruitment of intervention pharmacies, starting data collection as well as doing first analysis and comparisons regarding intensive pharmaceutical care vs. standard care.

Methods

Patients with a prescription for a LMWH were recruited in different community pharmacies in Switzerland: Trained pharmacists provided the same interventions, as in the “clinical setting” arm, and they performed these interventions according to patient’s need. Patients visiting a control pharmacy received standard care. Data collection was recorded by structured, questionnaire-based telephone interviews and by a monitored self-injection. For analysis, scores were developed with equal ranges (0 to 100) to describe subjective and objective appraisals.

Results

The *control group* reached a score of 81.9 ± 8.9 (mean \pm SD) concerning the application quality. This score was based on data collected during the monitored self injection. The quality of care had a score of 69.5 ± 19.1 and it could be shown that the application quality was significantly higher, if the first self-injection was observed by a medical professional (76.0 ± 8.5 vs. 85.6 ± 7.4 ; $p = 0.004$). 56.2% patients were instructed to inject into the thigh, compared to 43.8% who injected into the waist. A comparison of the application quality concerning the injection site waist vs. thigh didn’t show any difference ($p = 0.246$). Complete compliance, determined by collection of the used syringes, was achieved by 61.5% of patients. A majority of patients couldn’t answer the questions about side effects and potential drug interactions. Until the end of the master thesis, only 9 patients could be recruited for the *intervention group*. The first analysis shows an improvement in application quality (88.5 ± 4.9) compared to the control group (81.9 ± 8.9).

Discussion

Although the results from the control groups show that the level of application quality is already high, specific patients could benefit from an intensive pharmaceutical care. Because after discharge most patients visit a community pharmacy to get their prescribed LMWH, pharmacists play an important role in the continuity of care and the securing of correct use of low molecular weight heparins. A recommendation about the preferred injection site should be fixed and communicated consistently, because lots of patients get confused by the different information. Collection of the used syringes in some cases was difficult and it is possible that the rate of non-compliance is significant lower, because we couldn’t account for changes in the therapy. The scores are possibly not enough sensitive for detecting differences in the two populations. Also the emphasis of the questions should be checked, because they could have generated a bias. Further research is needed to appreciate, if the developed interventions of the “clinical setting” arm could be integrated into daily use of community pharmacies.

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