

# PATTERN OF USE OF PROPHYLACTIC ENOXAPARIN IN GYNECOLOGIC OPERATIONS IN EL-SHATBY MATERNITY UNIVERSITY HOSPITAL

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## INTRODUCTION

- Venous thromboembolism (VTE) is a serious public health problem and a leading cause of disability and death in postoperative hospitalized gynecologic patients. VTE is a common problem, yet often difficult to diagnose. It strikes a wide range of individuals, its onset cannot be predicted and it has a silent nature; that is why routine thromboprophylaxis is needed.
- The American College of Chest Physicians (ACCP) evidence-based clinical practice guidelines (2016) recommended the use of UH given twice per day or a daily dose of LMWH like enoxaparin in patients undergoing gynecologic surgery. Enoxaparin should be given in a dose of 40 mg subcutaneously 12 hours before surgery and once a day post operatively until discharge. This duration should be extended to 4 weeks in patients undergoing surgery for malignancy.

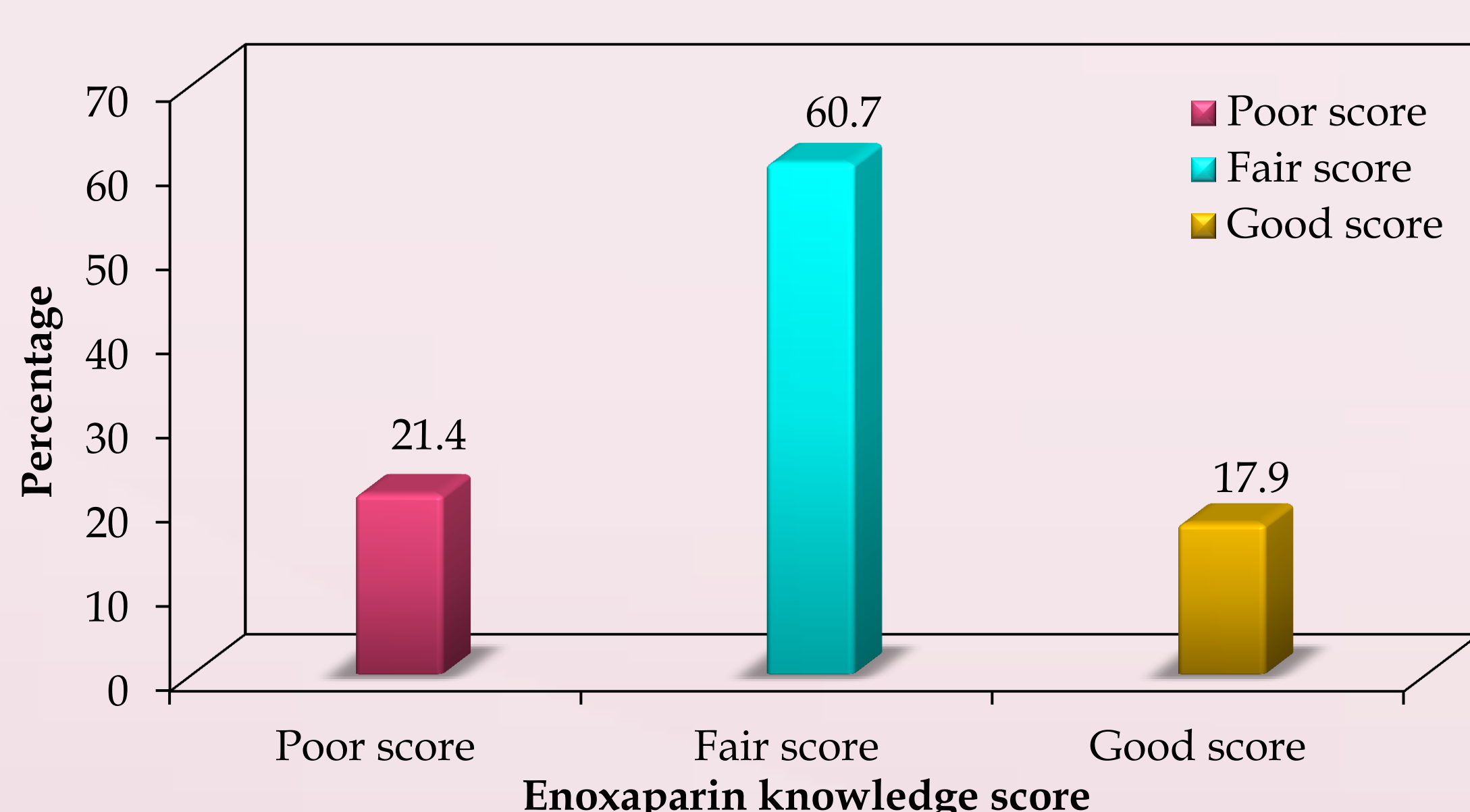
## Aim of the study

- The aim of the study was to assess the knowledge of gynecologists working in El-Shatby Maternity University Hospital regarding venous thromboembolism and its prophylaxis, and to describe the pattern of use of prophylactic enoxaparin in gynecologic operations.

## METHODS

- A cross sectional study and a retrospective case series was conducted in EL-Shatby Maternity University Hospital.
- All gynecologists were asked to fill a questionnaire and all available patient records for the years 2012-2017 were reviewed. Data were collected using a self-administered structured questionnaire and a record review form.
- The questionnaire was used to collect data from resident gynecologists about sociodemographic characteristics, knowledge about VTE and Enoxaparin and availability and adherence to ACCP guidelines and reasons for lack of compliance with these guidelines.
- Records of the previous five years were reviewed to collect data on sociodemographic characteristics of patients, medical history, surgical history, and pre and postoperative intake of enoxaparin. The collected data were revised, coded, and analyzed using the Statistical Package for Social Sciences (SPSS) program, version 23 for tabulation and analysis. Descriptive and inferential statistics were calculated: Logistic regression was used to predict the dependent variable, to determine the effect size of the independent variables on the dependent; to rank the relative importance of independents and to understand the impact of covariate control variables. General linear model - Multivariate analysis of variance (MANOVA) was used to test the hypothesis of a significant association between a set of interrelated dependent variables and interdependent variables.

## RESULTS



Distribution of resident gynecologists by their enoxaparin Knowledge score, El Shatby Maternity University Hospital, (2017-2018)

Crude odds ratio of factors affecting knowledge of gynecologists about VTE prophylaxis in gynecologic operations

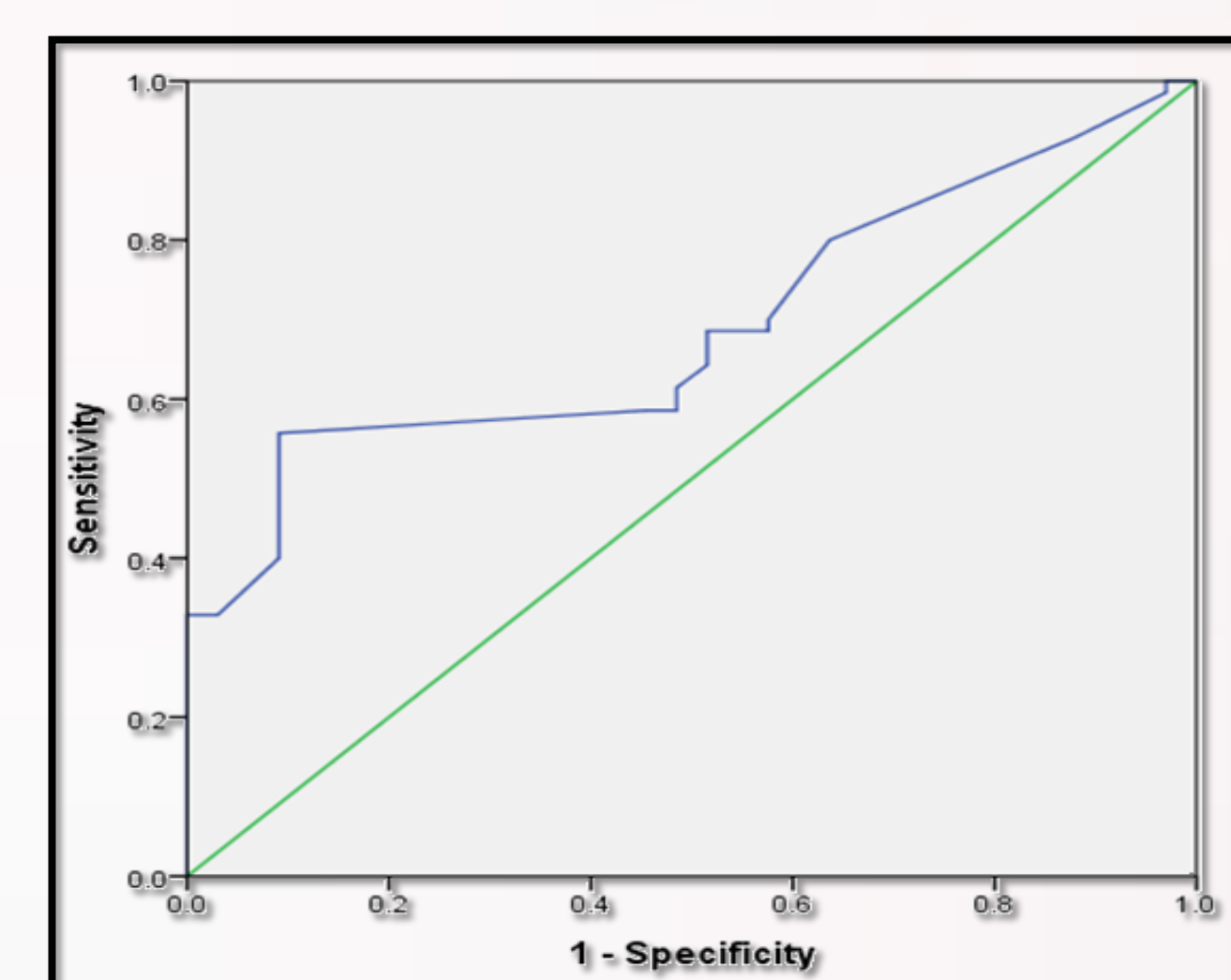
Variable	cOR	95% CI	X2MH
Age (<27 versus 27+ years)	0.500	0.075- 3.316	0.526, p = 0.400
Sex (females versus males)	1.636	0.229- 11.703	0.243, p = 0.622
Rank (junior versus senior and registrar)	0.500	0.075- 3.316	0.526, p = 0.400
Post graduate studies (no versus yes)	3.167	0.392- 25.576	1.247, p = 0.285
Years of experience (1 versus 2+)	2.000	0.302- 13.265	0.526, p = 0.400

MANOVA univariate test

Source	Dependent Variable	F	Sig.	Partial Eta Squared	Observed Power
Intercept	VTE knowledge score	1.375	0.254	0.061	0.201
	enoxaparin knowledge score	0.578	0.456	0.027	0.112
Rank	VTE knowledge score	1.316	0.264	0.059	0.195
	enoxaparin knowledge score	7.228	0.014	0.256	0.727

Logistic regression of enoxaparin score

Variable	B	Sig.	Exp(B)	95% C.I. for EXP(B)	
				Lower	Upper
Diagnosis	0.285	0.014	1.330	1.059	1.671
Year	0.100	0.523	1.105	0.814	1.500
Constant	-201.177	0.522	0.000		



ROC enoxaparin score calculated from binary logistic regression model

## CONCLUSION

- About three quarters (72.6%) of patients should have received VTE prophylaxis whereas only 25% of them received prophylaxis. There is a need to improve the knowledge of gynecologists regarding VTE prophylaxis.

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