

AN ASSESSMENT OF CARDIOVASCULAR DRUGS & THEIR ROLE IN  
**DRUG-INDUCED LUPUS**

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# 2 TYPES OF LUPUS

## DRUG-INDUCED LUPUS (DIL) & SYSTEMIC LUPUS ERYTHROMATOSUS (SLE)

### SIMILARITIES

- Autoimmune diseases
- Presentation

# PATIENT PROFILE

<b>VARIABLE</b>	<b>DIL</b>	<b>SLE</b>
<b>Gender</b>	1:1	9:1
<b>Age</b>	50-70 yo	29 yo
<b>Onset</b>	Mos. – yrs.	Hrs.-days
<b>Race</b>	Whites > Blacks	Blacks > Whites

# HOW COMMON IS DIL?

- PREVALENCE 10% of SLE<sup>1</sup>
- INCIDENCE 6.7%<sup>2</sup>
- PROGNOSIS Excellent

1 Borchers AT, Keen CL, Gershwin ME. Drug-induced lupus. *Ann N Y Acad Sci.* 2007;1108:166-182.

2 Cameron HA, Ramsay LE. The lupus syndrome induced by hydralazine: a common complication with low dose treatment. *Br Med J.* 1984;289:410-412.

# THE CULPRITS

CATEGORY	DRUGS
Antiarrhythmics	Procainamide Quinidine
Antihypertensives	Hydralazine Methyldopa
Antihyperlipidemics	Lovastatin Atorvastatin Gemfibrozil

Katz U, Zandman-Goddard G. Drug-induced lupus: an update. *Autoimmun Rev.* 2010;10:46-50.

DiPiro JT, Talbert RL, Yee GC, et al. *Pharmacotherapy: A Pathophysiologic Approach.* 9<sup>th</sup> ed. United States. The McGraw-Hill Companies, Inc. 2014. <http://accesspharmacy.mhmedical.com.libproxy2.usc.edu/content.aspx?sectionid=48811477&bookid=689>. Accessed June 2, 2016.

# HIGH RISK PATIENTS

High dosing

Extended use

Slow acetylators

Family history

# LAB FINDINGS

MARKER	DIL	SLE
Antihistone antibodies	> 95%	~ 50%
Anti-DNA antibodies	Anti-ssDNA	Anti-dsDNA

Burlingame RW. The clinical utility of antihistone antibodies. Autoantibodies reactive with chromatin in systemic lupus erythematosus and drug-induced lupus. *Clin Lab Med.* 1997 Sep. 17(3):367-78.

Epstein A, Barland P. The diagnostic value of antihistone antibodies in drug-induced lupus erythematosus. *Arthritis and Rheumatism.* 1985;28:158-62.

# IDENTIFICATION OF DIL

No history of SLE

Clinical presentation

Drug discontinuation resolves DIL

Lab findings

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# WHY IDENTIFY DIL?

Unnecessary SLE treatment

Higher risk patient population

Cost

Correct billing: ICD-10 M32.0

*DIL treatment: discontinue the drug*

# SUMMARY

Date of birth

Medication  
record

Diagnostic  
information

Lab results

CLAIMS DATA

50-70 yo

DIL  
associated  
drugs

- Dosing
- Duration

Onset of  
symptoms

Lab findings

PATIENT PROFILE

ID DIL

Improve pt  
outcome

Save on  
cost

Correct  
ICD10  
M32.0

BETTER OUTCOME

THANK YOU!

QUESTIONS?