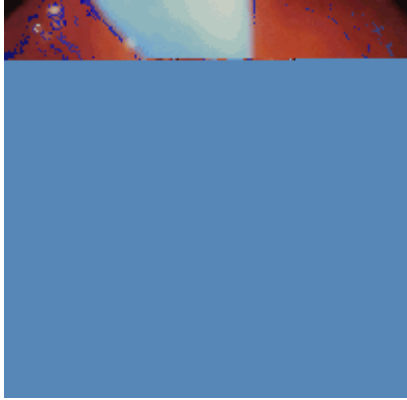


(QGRVFRSLF 0XOWLSOH *DVWULF 3RO\SHFWRP
&DVH 5HSRUW DQG 'LVFXVVLQR

\$EX 7D\XREKDPHG 0RKLGGLQ ~~QZ-XXXX~~UXH



)LJXUH HQGRVFRSLF JDVWULF SRO\SHFWRP\ YLHZ



)LJXUH ROORZ XS HQGRVFRSLF YLHZ

PHU VDWG SKDJH HQGRZ XS V KRZV QR GHW
 ZLWK VLJQLILFDQW LPSURYHHPHQW RI WKH
 XSSHU *, KHPRUUKDJH RU FKDQJH RI VWR
 H[DPLQDWLRQ UHYHDOV QR VLJQ RI DQHP
 \$IWHU WKH SRO\SHFWRP\ WKH SDWLHQW FORVH REVHUYDWLRQ
 ZLWK URXLWLQH SRVW SURFHGXUDO WUHDWPHQW IRU WCUHH GD\ 1R SRVW
 SRO\SHFWRP\ FRPSOLFDFWLRQ RU KHPRUUKDJH +HU VWRRO FRORU
 ZDV QRUPDO 7KH SDWLHQW ZDV GLVFKDUJHG ZLWK PHGLFDWLRQ DQG DG YLVHG
 IRU WKH VHFRQG SKDJH RI SRO\SHFWRP\ FRPSOLFDFWLRQ
 FRPSOLFDFWLRQ DULVHV SRO\SHFWRP\ SURFHGXUH DQG QR HYLGHQ
 SRO\SHFWRP\ FRPSOLFDFWLRQ ZDV QRWHG
 HQGRVFRSLFDOO\ UHPRYHG ZLWKRXW DQ HXJUDHG WUHDWPHQW
 SRO\SHFWRP\ VLWHV VKRZ H[FHOHQW UHFRYHU\)LJXUH ZLWK QR VLJQ RI
 XOFHUDWLRQ RU DQ\ RWKHU OHVLRQ 7KH SDWLHQW ZDV NHSW XQG HU FORVH
 REVHUYDWLRQ IRU WCUHH GD\ ZLWK SRVW SRO\SHFWRP\ WUHDWPHQW DQG QR
 FRPSOLFDFWLRQV ZHUH REVHUYHG \$ 32/<3 LV GHILQHG DV D SUROLIHU DW



)LJXUH JDVWULF SRO\SHFWRP\ QG SKDJH HQGRVFRSLF YLHZ

DGHQRPDWRXV SRO\SV LQ FRORQ > @ +\SHUSODVWLF SRO\SV DFFRXQW IRU
DSSUR[LPDWHO\ RI JDVWULF SRO\SV > @ DQG DUH EHLHYHG WR GHYHORS
DV D FRQVHTXHGFH RI PXFRVDO UHVSQRVH WR WLVVXH LQMXU\ DQG
LQIODPPDWLRQ :KLFK ZHUH SUHYLRXVO\ FRQVLGHUHG FRPSOHWHO\ EHLJQ
EXW UHFHQW HYLGHGFH VKRZV VPDOO EXW ZHOO GHILQH PDOLJQDQW SRWHQWL
> @ 7KH UHSRUWHG IUHTXHGFH RI G\VSODVWLF IRFL ZLWKLQ K\SHUSODVWL
SRO\SV VKRZHG D ZLGH UDQJH > @ +LJDZD > @ DQG =HD
,ULDUWH > @ IRXQG WKH LQFLGHGFH RI PDOLJQDQF\ LQ K\SHUSODVWLF SRO\SV
ZDV DQG UHVSHFWLYHO\ 7KRXJK WKHUH LV DQ LQFUHDVHG ULVN RI
DGHQRFDUFLQRPD HOVHZKHUH LQ WKH VWRPDK EHFDXVH RI DVVRFLDWLRQ RI
FKURQLF JDVWULWLW SDUWLFXODUO\ DXWRLPPXQH JDVWULWLW DQG + S\ORUL
JDVWULWLW > @ \$ SRVLWLYH DVVRFLDWLRQ EHWZHHQ)*3V DQG DFLG
VXSSUHVVLQRQ ZDV ILU@7KILH\$RUSRVGLQO\ EHFDXVH RI

'DLER,WDEDVKL 0 +LURWD 7 0DOLJQDQWXWKDCSRUJWDRVLR @ RI QDVWXLV3 +DKQ (* (O
K\SHUSODVWLF SRO\SV \$P - *DVWURHQWHURORXS *DVWULF 3RO\SV 'LDJQRVWLF
'DYDULV 3 3HWUDNL . \$UFKLPDQGULWYHU\$XV +SRO\SHFWRP\ JDVWULF SRO\SV
3DSDFKDUDODPSRXV 1 0XFRVDO K\SHUSODVWLF SRO\SV RI WKH VWRPDFK
'R WKH\ KDYH DQ\ SRWHQWLDQ WR PDOLJQDQF\ " 3DWKRO 5HV 3UDFW
+LJDZD .)XFKLJDPL 7 ,LGD 0 \$R\DJL . ,ZDVKLWD \$ HW DO
3RVVLEOH QHRSODVWLF WUDQVIRUPDWLRQ ZLWK K\SHUSODVWLF SRO\SV
\$\$SOLFDFWLRQ RI HQGRVFRSLF SRO\SHFWRP\ 6XUJ (QGRVF
=HD ,ULDUWH :/ 6HNLQH , ,WVXQR 0 0DNL\DPD . 1DLWR 6 HW DO
&DUFLQRPD LQ JDVWULF K\SHUSODVWLF SRO\SV \$ SKHQRW\SLF VWXG\ 'LJ 'LV
6FL
7RPDVXOR - *DVWULF SRO\SV +LVWRORJLF W\SHV DQG WKHLU UHODWLRQVKLS
WR JDVWULF FDUFLQRPD &DQFHU
*UDKDP -5 *DVWULF SRO\SRVLV RQVHW GXULQJ ORQJ WHUP WKHUDS\
ZLWK RPHSUD]ROH 0HG - \$XVW
.RK 7- %XOLWWD &-)OHPLQJ -9 'RFNUD\ *- 9DUUR \$ HW DO
*DVWULQ LV D WDUJHW RI WKH EHWD FDWHQLQ 7&) JURZWK VLJQDOLQJ SDWKZD\
LQ D PRGHO RI LQWHVWLQDO SRO\SRVLV - &OLQ ,QYHVW
.RK 7- &KHQ ' *DVWULQ DV D JURZWK IDFWRU LQ WKH JDVWURLQWHVWLQDO
WUDFW 5HJXO 3HSW
&DWV \$ 6FKHQ % (%ORHPHQD (5RRVHGDDO 5 /LQGHPDQ - HW DO
3DULHWO FHO SURWUXVLRQV DQG IXQGLF JODQG F\VVW GXULQJ RPHSUD]ROH
PDLQWHQDQFH WUHDWPHQW +XP 3DWKRO
6WROWH 0 6WLFKW 7 (LGW 6 (EHUW ')LQNHQ]HOOHU *)UHTXHQF\
ORFDWLRQ DQG DJH DQG VH[GLVWULEXWLRQ RI YDULRXV W\SHV RI JDVWULF SRO\SV
(QGRVFRS\
-DOYLQJ 0 .RRUQVWUD -- :HVVHOLQJ - %RH]HQ +0 '(-RQJ 6 HW DO
,QFUHDVHG ULVN RI IXQGLF JODQG SRO\SV GXULQJ ORQJ WHUP SURWRQ SXPS
LQKLELWRU WKHUDS\ \$OLPHQW 3KDUPDFRO 7KHU
=ZLFN \$ 0XQLU 0 5\DQ &. *LDQ - %XUW 5: HW DO *DVWULF
DGHQRFDUFLQRPD DQG G\VSODVLD LQ IXQGLF JODQG SRO\SV RI D SDWLHQW ZLWK
DWWHQXDWHG DGHQRPDWRXV SRO\SRVLV FROL *DVWURHQWHURORJ\
\$EUDKDP 6& 1REXNDZD % *LDUGLHOOR)0 +DPLOWRQ 65 :X 77
6SRUDGLF IXQGLF JODQG SRO\SV FRPPRQ JDVWULF SRO\SV DULVLQJ WKURXJK
DFWLYDWLQJ PXWDWLRQV LQ WKH EHWD FDWHQLQ JHQH \$P - 3DWKRO

%LDQFKL /. %XUNH &\$ %HQQHWW \$(/RSH] 5 +DVVRQ + HW DO
)XQGLF JODQG SRO\SV G\VSODVLD LV FRPPRQ LQ IDPLOLDO DGHQRPDWRXV
SRO\SRVLV &OLQ *DVWURHQWHURO +HSDWRO
<RRQ :- /HH '+ -XQJ <- -HRQJ -% .LP -: HW DO +LVWRORJLF
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EHWZHHQ HQGRVFRSLF IRUFHSV ELRSV\ DQG HQGRVFRSLF PXFRVDO UHVHFWLRQ
VSHFLPHQ :RUOG - *DVWURHQWHURO
ORODHL 0 0DVKD\HNKL 5 =RMDML + +DJKD]DOL 0 5H]D =DOL 0
*DVWURHQWHURORJ\ DQG +HSDWRORJ\)URP %HG WR %HQFK *DVWULF SRO\SRLG
OHVLRQV DQDO\VLV RI KLVWRSDWKORJLF IHDWXUHV RI HQGRVFRSLF
SRO\SHFWRP\ VSHFLPHQV