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交锁髓内钉在股骨骨折治疗中的价值

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摘 要：目的：乙哑╬ 拉撢ピ扛伉岖撓撓勸噤夔┥ 她关壨叼哖⇑ 方法：▾ 咤掂岖撓撓勸匆尉× ┳ 復傒傚恥謺テ 90 ⎫ 謺憔ᶠᵐ呀挽 ⎪ 2020 兡 04 咔ㄖ 2021 兡 04 咔謺乙宦吤窇暺掇咪搗嵓增匊ᶠᵐ噱謺乙┳ ┣ 宦謺㊣埡宦暨彐—㊀扱呥ピ任偯噤夔暩丁娀媲宦暨彐╬ 拉撢ピ扛任偯噤夔暩謺GHz 45 ⎫ 謺嗺慆关壨叼哖⇑ 结果：娀媲宦デ嵛孔愴⇐峏岛唎佺⇐ㄊ˜˜劉唲⇐㊀夠嫽兢ᵃᵇ失ᵃᵇ壟塺♫╝ ㊣埡宦暨P瞥0.05暩謺噤夔嵑俍塺 97.78%謺撣╝ ㊣埡宦 84.44%暨P瞥0.05暩謺┳ 六匚唅☞╝ ㊣埡宦暨P瞥0.05暩謺VAS 忯乙♫╝ ㊣埡宦暨P瞥0.05暩⇑ 结论：╬ 拉撢ピ扛关壨◐ へ咍撣謺关壨伉岖撓撓勸┥ 謺nA尅姁撓勸圖μℓ呀挽謺一憣咦nm丹侜謺ᵃᵗᵘ┆ 吤揖謺一傥兢ᵃᵇ失搢搁謺一愿太央謺☞ 卅勓咦匚唅謺二咕即全◐ へ⇑

关键词：╬ 拉撢ピ扛暻岖撓撓勸暻噤夔嵑俍塺暻VAS 忯乙暻兢ᵃᵇ失暻┳ 六匚唅

The Value of Interlocking Intramedullary Nail in the Treatment of Femoral Fracture

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Abstract: Objective: To analyze the application effect of interlocking intramedullary nails in the treatment of femoral fractures. Methods: A total of 90 patients with femoral fractures in our hospital were selected as the observation objects. The selection time was from April 2020 to April 2021. Internal fixation treatment) and the study group (with interlocking intramedullary nailing treatment), 45 cases in each, and the application effects were compared. Results: The incidence of complications such as joint adhesion, fat embolism, incision infection, and pressure ulcer in the study group was lower than that in the reference group (P<0.05), and the good rate of treatment was 97.78%, which was higher than that in the reference group (84.44%) (P<0.05). Clinical indicators were better than the reference group (P<0.05), and the VAS score was lower than that of the reference group (P<0.05). Conclusion: Interlocking intramedullary nails have higher application value. When used in femoral fractures, they can shorten the fracture healing time and accelerate postoperative recovery. On the other hand, it can reduce the risk of complications, relieve pain, and optimize surgical indicators, which has promotion value.

Keywords: Interlocking intramedullary nail; Femoral fracture; Good rate of treatment; VAS score; Complication; Clinical indicators

岖撓撓勸呖┳ 六兑徨撓勸變伻謺岖撓撓勸乙┳ ┏ 嫊撓勸變伻謺搔啾鹵┥ kℓ變伻堡埁謺ㄱ偯勓咦夕慘吤窇謺ぇ懘撓勸圖μℓ謺撓勸慄兑壯晏卻⇐挽卻侠ㄲ× 壨勍崠謺⎫俏撣媶伧带⇐扇埬姆ⱪ嫽謺撓勸侚变冽謺匆尉太央嫽◐ 慆撣謺匆岗岨岩謺丅墇妄岘安孻嫽失堳謺┤ 扇尉nA丅墇▀ザ謺咕嗚╨ 搢搁ᵛ⇑ 宿寀nm屔兡偕刜⇐撓恺夏唷■ 尳嫽呖怎夼偁ᵃᵇ尳⊡謺羸晏卻⇐挽卻咁ㄲ㊦撓撚夬夼呖岖撓撓勸佢咤夼伶謺关㊦呀ㄹ�謺一傥囊ㄟ捼ㄹ謺囆岨nm㊦呀侜♪勓咦謺⌂寁—㊀扱呥ピ任偯勓咦咕僕捼刜謺✕ ⱪ侧謺刱侜劒謺撓恺圖μℓ恺扉┓ 墠剝謺掫妻(ㅂ)夔勴咦她懘嗕謺╬ 拉撢ピ扛任偯噤夔伉撓勸┥ ᶠᵐ澤嵑俍┳ 六叼哖謺二咕脩ダ刜撣⇐咦nm刱侜击嫽☞垱謺憙圁ᶠᵐ▸ ⌂寁噤夔吤窇謺叼哖慆┳ 墠剝謺呖嵑俍憔匦⇑ 佢╝ 嗔謺咤娀媲▾ 咤掂匆尉┳ ⎫謺傚┣ 嫊勓咦吤唤关壨◐ へ懘彐╗ 傚嗺卹媲謺墇彙憇俏┓ ⇑

1 资料和方法

/,/ ┆ 崹悚吗

憔ᶠᵐ咤掂 0. 0. 兡 . 2 咔+0. 0/ 兡 . 2 咔挽 7. ⎫ 岖撓撓勸匆尉× ┳ 復傒傚恥謺乙┳ ┣ 宦謺㊣埡宦丁娀媲宦謺GHz 23 ⎫ ⇑ ナ┥ ㊣埡宦壳刜 03 ⎫ 謺佶刜 0. ⎫ 暻03 ⎫ 愫婺ⱪ謺 /. ⎫ 撣媶伧带ⱪ暻3 ⎫ 叀ⱪ謺3 ⎫ ナ▥ ⇑ 娀媲宦壳刜 02 ⎫ 謺佶刜 0/ ⎫ 暻02 ⎫ 愫婺ⱪ謺/0 ⎫ 撣媶伧带ⱪ暻3 ⎫ 叀ⱪ謺2 ⎫ ナ▥ ⇑ 佢咤悚吗吳慆侧儳写暨N暾. ,. 3暩謺嫠μℓ嗺慆啥ン⇑

忴吡啥ン暺寀 V 客啌哷娊忴┳ 岖撓撓勸暻优偶伉┓ kℓ媝鼻僕懹太央⇐岨岩⇐妄岘安孻⇐囊ㄟ掙娭⇐匆岗侠冽号ᵗᵉᶰ嫽┳ 六彙墇⇑

宙夕啥ン暺嫠μℓ—㊀扱呥ピ任偯勓咦㊦╬ 拉撢ピ扛任偯噤夔匚凌暻姬剝偳摽ピ傃謺嬓尧kℓ劂╟ 謺┘ 寀壯(ㅂ)掂❀墇俱Gy♂ 勫ン⇑

卵掃啥ン暺μℓ兢彉嬝卞ⱪ暻尔傥掫忪忝冷匆尉暻μℓ兢婧寀卞ⱪ⇑

/,0 吤噱

㊣埡宦暺咤宦匆尉ᵗᵉᵃᵐ ▾ —㊀扱呥ピ任偯勓咦噤夔暺ᵗᵉᵃᵐ ▾ 娥崺侠娥峸屾μℓ敓戲謺咦ㄟン供謺堠冢任偯┌ 侨謺┘ 匆

侑壘娟☆回囆磬謦敓戲惀叼nm謦伉岖侠亓め┆ と㋇¯謦乙媮宧宪謦咁揊芻侑謦毘ᶠᵍᵃ嵑俍徬扈謦乙ㄨ⅀ 撓勸┣ 嫚侠亓謦叹尥扱唦謦怫后德鼻謦憬冶否—㉃ㄱ謦弰扛任偯謦啌哷侜♪剝儿謦叡× 慮媝┤ 关こ勿崋デ嵛謦一傥┓ 屈徥卞ㄠ謦嗒獷謦寺μℓと㋇¯謦咦nm└ ▾ 勷劉唲噤夔⇑

娀媲宧暺咤宧芻屘└ ▾ ╫ 拉撢ピ扛任偯噤夔暺

暨/暩咦ㄨン供暺侑墠μℓ兢失謦关壨勷墐學謦冗僈 V 客啌哷謦呉姵撓勸懹♪讋酩扉芻岗岖撓侧孓掏揶垱崟侠惹┻ 挽惟媮謦姵こ撢ピ扛抄鼻憬偵謦啾卤撓勸懹♪ ←撓勸嫚剝儿←┤ 扇媝鼻嫽謦姵偯撢ピ扛伻nF謦呉姵勓咦憬关失謦卵掃偊伉嬰凫失芻屘⇑

暨0暩勓咦吤噱暺ᶠᵍᵃ亓(五)♪謦侘冱峮ピ剝儿謦復傒捺克卞ㄠ剝儿謦兢甍彐そ侜謦叁掃㈎咔呫謦靿撢謦嗷嗢靿侈 .,3 嘂嬚謦旻崟侧┛ 撢ピ扛 / 嘂嬚謦扚傚？ 伻岖撓撓勸芻屘謦猛伉崋ㄨピ亓タ惨謦めと㋇¯謦乙媮宧宪謦こ勿崋デ嵛謦咁揊夼垗謦毘澤嵑俍徬扈謦nAゲ乙復傒GHzデ嵛揖謦呉姵デ嵛峮ピニ⊡剝儿謦┛ 憃挽嫆ㄨ寵冗媜謦甍タ撓撢峮謦ね㙮 V 客憘徬咪厊丨徬扈謦傚撓勸┣ 嫚甍彐堠冢侜♪謦憔壨 6 ㈎嬚撢峮靿侧仗謦甍彐靿撢侑墠謦憔匪μℓ暩╫ 拉撢ピ扛謦脩彸姐ン仗謦尥タ撢ピ扛謦扛傺关噔タデ嵛揖謦关┛ ナ┓ 3 嘂嬚謦慹嫚←慲嫚拉扛⇑ 扚傚 A 伻岖撓撓勸芻屘謦关伉崋ㄨ嗓┤ タ惨謦cm侠屑愰撠撓謦咁揊夼垗謦甍彐侜♪謦ザ嘌扚呶呀任偯謦皚┣ 哕撓弰扛匦タ兢任偯┛ 岖撓憃懹謦啌哷侜♪剝儿謦μℓ唚nm尥タ撢ピ扛謦王偯岖撓憃←撓勸慲嫚謦扚傚孈娮刜撓勸芻屘謦ね㙮扱┣ 謦匢μℓ孈娮宦宪謦刱侜徼∡♪謦扚傚撓尔卞芻屘nAゴ甍彐啡撓謦へ彐╫ 拉撢ピ扛任偯噤夔⇑

暨1暩咦nm侑墠暺咦nmㄹㄴ謦勷劉唲噤夔┏ 崟┌ 侨謦咦nm┣ 侨㊤掃冢嚦嬝謦兢冗僈六┐ ㄖ峎慱ㄴ謦┌ 侨nm冗僈崋デ嵛ㄖ峎拿垳謦㈎┤ 咔nm┓ 六彐悻謦└ ▾ 恶扇忥宦謦咦nm /0 log匎掃慲嫚╫ 拉扛⇑ 傚┣ 宦芻屘冗僈掫忪謦┳ 咱┆ 兡謦嗷┏ 咔侜哷┆ 嗂謦啌哷撓勸圖μℓ剝儿謦復傒兢㋇失謦忯♠噤夔叼塺謦傚嗺┳ 六匚啥⇑

/,1 復傒匚啥

暨/暩傚嗺噤夔叼哖暺乙┳ ┏ ┤ ㄇ偯啥ン謦☞暺撓恺偨ダ圖μℓ謦吳デ嵛孔愶←岖岛唎佺嫽兢㋇失謦芻屘咢劉ㄷ太夼謦GHzデ嵛ㄖ峎嗓兑謦彐ㄩ偨ダ┓ ㋇¯掾謦nA嗓兑壩囊←儩× 謦嵑暺刱侜嵑偯謦デ嵛ㄖ峎☞嵑塺伉 6.#▾ ┐ 謦nA暺听愰变冽儀┛ /3¡ 謦彐ㄩㄖ峎㋇ㄷ┆ 偯掾ㄹ謦吳吡扛謦儳暺咦nm兢㋇失偁謦〕俏デ嵛孔愶謦┤ 扇凅中嗓兑壩囊謦☞嵑塺; 暨刽〕同+nA〕同+儳〕同暩(#⁽⁰⁾⇑

暨0暩傚嗺太夼媝鼻暺扃壨T?Q徬徯太夼忯乙謦忯♠咦nm太夼媝鼻謦テ/b←1b←5b┏ ┤ 呀挽嗯謦テ忏/. 乙謦乙同└ 噤夔叼哖MWᶠᵢ⁻嗺〕デ孳⁽¹⁾⇑

暨1暩傚嗺┳ 六匚啥暺oo匡勓咦呀挽←┓ 六囊ㄩ呀挽←撓恺圖μℓ呀挽←咦┤ 丅獷扉謦忝冷兢傚嗺GHz揹同へ⁽²⁾⇑

暨2暩兡嗺兢㋇失暺复傒┣ 宦芻屘咦nm丅墇デ嵛孔愶←岖岛唎佺←乙㋇¯剔唲←㉃夠嫽兢㋇失她㋇壩剝儿謦忏嬚兢傚嗺GHz揹㋇壩塺⁽⁶⁾⇑

/,2 寁忏偕乙哑

扃壨 QNQQ/6,. 思● 甍彐寁忏侑墠謦扃壨吤儳kℓ恺刜啌摽吤噱謦ᵗᵉᶜ扉悚吗▾ T rY 忏嬚壨暨 X ¤ q暩娊⇑ 偯刜同鹵壨 v⁰呂偳謦▾ 暨# 暩彙悻⇑ GHz宦同鹵咘 │吤儳妠kℓ她嗓分乙儺謦N暩. ,. 3┳ 咕呜帡儳写⇑

2 结果

0,/ 嗺慆噤夔叼哖

娀媲宦噤夔☞嵑塺撣┛ ㊣埡宦謦宦挽儳写呉呜暨N暩. ,. 3暩⇑ 怏徨彙 /⇑

彙 / 噤夔叼哖傚嗺Y &# '[

宦ㄨ	〕同	☞	嵑	nA	儳	☞嵑塺
娀媲宦	23	13	7	/	.	75,56
㊣埡宦	23	03	/1	4	/	62,22
x^2	-	-	-	-	-	2,717
N	-	-	-	-	-	. ,. 04

0,0┳ 六匚啥宦挽嗺慆

娀媲宦GHz揹┳ 六匚啥优☞┛ ㊣埡宦謦宦挽儳写呉呜暨N暩. ,. 3暩⇑ 徨彙 0⇑

彙 0 ┳ 六匚啥宦挽嗺慆Y &¤ q[

宦ㄨ	〕同	勓咦呀挽暨k g暩	┐ 六囊ㄩ呀挽暨b暩	撓恺圖μℓ呀挽暨k rf暩	咦┤ 丅獷扉暨k j暩
娀媲宦	23	/. /,10¤ 2,33	4,20¤ /,/.	4,. 1¤ . ,13	012,04¤ /0,/2
㊣埡宦	23	/10,64¤ 2,05	/. ,65¤ /,. 7	5,67¤ . ,1/	2. 5,40¤ /0,66
r	-	11,7. 5	/7,055	04,465	43,5. 2
N	-	. ,. . .	. ,. . .	. ,. . .	. ,. . .

0,1 嗺慆兢㋇失

娀媲宦兢㋇失㋇壩塺♫┛ ㊣埡宦謦宦挽儳写呉呜暨N暩. ,. 3暩⇑ 怏徨彙 1⇑

彙 1 兢㋇失傚嗺Y &# '[

宦ㄨ	〕同	デ嵛孔愶	岖岛唎佺	と㋇¯剔唲	㉃夠	㋇壩塺
娀媲宦	23	.	.	/	/	2,22
㊣埡宦	23	/	/	2	1	0. ,. .

x^2	-	-	-	-	-	3,. 53
N	-	-	-	-	-	. ,. 02

0,2 嗺慆┣ 宦 T? Q忯乙

娀媲宦GHz呀嗯 T? Q忯乙♫╝ ㊣埡宦謺宦挽儰写呉呜暨N暩. ,. 3暩⇑ 怏徨彙 2⇑

彙 2 ┣ 宦 T? Q忯乙傚嗺Ⅵ &¤ q[

宦ㄨ	⟩同	咦nm / b暨乙暩	咦nm 1b暨乙暩	咦nm 5b暨乙暩
娀媲宦	23	1,/ 6¤ . ,07	0,5/ ¤ . ,53	/ ,/ 0¤ . ,2/
㊣埡宦	23	2,25¤ . ,26	1,62¤ . ,22	0,. 6¤ . ,26
r	-	/ 3,21/	6,5/ 6	/ . ,0. /
N	-	. ,. . .	. ,. . .	. ,. . .

3 讨论

晏卻× 壨〕俏扇堜務屮←埢仗刜卞♁嫽謺挽卻× 壨〕俏撣侚伧帶嫽謺nA慄慮鸟傝倶刂× 壨崟岖撓謺撓撚夬夼慆┳傥徨謺〕俏撓岨奚嫽謺昴夼墠刜撓勸┳ 徥㊉伶⇑ㄉ夼nm謺剪屘┳ 忳撓勸僕懹卜垹太央謺剪岗岨岩謺囊ㄴㄋ捼謺愬宦宪岨岩謺冽励彊岨㊦嚶岨謺懹乙剪屘nA丅墇嚶夢←妄┓ 奋吔嫽失堳謺撓勸嫚ㄉ墠媗♪nA彙墇┳ 変冽謺〕俏剪岗尅姁嫽謺丅墇ㄗ¯cm囊ㄴ嫽写兑囊ㄴ謺兢◇咕撓只揲謺┤ 扇呀㎕兢偁侚撓勸謺log佯彊嬝ㄋㄍ卞♁謺丅彊慮偁謺傝崠℡ザ謺㎕兢剽唲nA丅墇ㄉ埆嫽ダ慡失堳謺兮嗔嫺偕勘咦吤喚崟デ扇徥⁸⇑ 掀妻╫ 慄慱慔┣ 她ㄉ僈謺╫ 慄╙ 叻搏丅┓ 媳謺侈一╗ 撓勸ㄉ夼歷謺㎕呀壯╝ 屔兡艸墇恥她一扇謺撓恍夏唷傝崠岖撓撓勸〕同┼ 伉┓ 吡侈一謺撓勸太央嫽◐ 慆撣謺咦nm刱侑慲異斛謺揮偕她勘咦吤窅傚ぇ懇夼剝愰况崟デ扇徥⇑ —㉃扱哋ピ任偯勘咦憙圁影ㄉ▸ 謺勘咦慮婺┤ 謺侈一╗ ┓ 凰徥她卞♁謺×♁侧謺㈱搁孳同慆撣謺侈一兢ㄉ失ㄉ墠搢搁謺丅彊扉偁謺刱侑斛謺┓ ㄴ╝ 勞屘彐ㄴㄋ崀她击慲刱侑⇑慲兡咾謺掇妻㈭夔勴咦她懇嗕謺撓勸侑♪吟窅偁嫁偁唗謺nA啾鹵┓ k㎕撓勸變伻謺憔匪慘㎕侑♪吟喚謺岖撓撓勸▾ 抄撓撓勸呱┳ 兑徨謺扃壨╫ 拉撢ピ扛ピ任偯噤夔謺傶呱侧婺異倣卞♁捻崟呱♫謺任偯叼哖偯謺㎕呀nA壨╝ 峁撓撓勸侑♪謺└ 兑循弰扛任偯叼哖┓ k㎕謺╫ 拉撢ピ扛nA僖撓恍ㄣㄋ屙ㄣㄋ謺婺㎕岖撓壟墠徼∈家响謺咦nm刱侑叼哖咍一媹丅⇑

妛ㄟ謺╫ 拉撢ピ扛ピ任偯勘咦影全噴关壨╝ GHz嫁變伻撓勸噤夔冶┤ 謺亅婺㎕壟堜偕任偯㊉儿謺婺㎕ㄊ偕偨后剃←撓勸徼∈偕愶寍剃嫽壟堜ㄊ偕啿凿謺粟慮撢ピ扛—㉃任偯悻ㄸ嵑偯圖㎕叼哖謺效撓勸懹♪彊慱剝儿惀ㄸ嵑偯こ勿× 壨謺一傥彊回瀆墆掙娭傝崠她兢ㄉ失⇑ 怎勘咦吤喚扃壨愁cm伻任偯她吤窅謺┆ 吤揖姺こ┓ 岖撓抄異謺ㄍㄌ┆ 吤揖ㄊね

ナ听愰卼ㄹ丌峎謺咕叼侈一撓勸┣ 嫚任偯媦偯剃謺勢屘nA伉咦nm凵咱懘彐嬔㈱她崗⊡囊ㄴ謺憬击冗僈恶扇忥宦謺ぇ懘崗⊡丌峎她刱侑謺刱侑嗓兑囊ㄴ⇑ 撢ピ扛二咕冰剃任偯她堡垱謺┆ 吤揖寔匷慆俍冱異謺ㄍㄌ┆ 吤揖掀妻夼剝冉侑寔匷㎕墠她壟墠关ㄟ謺懇シ吡扛嫽掷搔她丅墇謺㎕呀咕└╝ ㄝ垿撓夭壟抄謺ぇ懘撓恍圖㎕⇑ 咤娀媲┤ 謺㊣埡宦咦nm┓ 六囊ㄴ慲異劒╝ 娀媲宦謺撓勸圖㎕呀挽抄╝ 娀媲宦謺怜呉怎噤夔吟喚┓ 剪屘刱侑慲異咍击⇑怎勘咦吟窅┆ 崹伉咦nm㈦┘ log優calㄉㄅ丅┆ 嫚拉扛謺ぇ懘撓勸刱侑她k㎕呀倣僕懹㈭在剃卞♁媝異捻崟呱♫謺一傥咦nm兢ㄉ失⇑ 咤嗂娀媲家哖呜婗謺㊣埡宦咦nm兢ㄉ失ㄉ壟塺暨0. ,. . # 暩呉呜♫╝ 娀媲宦暨2,22# 暩謺咕寁忏偕劂┗ 謺└ 嗔k㎕呀謺咿偤崷嫽■ 伉妠デ娀媲┤ ⁸⁶┣ 澤丅妠k㎕家忿謺�十忾咤嗂娀媲㎕墠剃⇑ ╫ 拉撢ピ扛ピ任偯勘咦ゑ⁻⁾慆儀謺勘咦慮媝┤ 僥nA峎懇シ ㅐ媮撓嶘謺一傥㈭在剃卞♁謺咕ㄷ╝ 侑♪撓勸微∈家响謺一傥崗⊡听愰嫽冢惀她兢ㄉ失謺二咕慆撣偁ダ剃謺咤嗂娀媲┤ 謺㊣埡宦咦┤ 丅彊扉偁╝ 娀媲宦謺勘咦呀挽抄╝ 娀媲宦謺怜呉怎噤夔吟喚偁ダ剃咍撣謺嗔侠謺怎噤夔喤窅徬扈慆偍謺nA咍偍她囹墠撓勸挽宋寔宦宪謺撓勸圖㎕☞嵑塺咍撣⇑ 咤娀媲┤ 謺㊣埡宦撓勸圖㎕☞嵑塺┳ 62,22# 謺娀媲宦┳ 75,56# 謺呉呜♫╝ 娀媲宦謺怜呉怎勘咦喤窅噤夔剖咕叼塺咍撣謺撓恍圖㎕偍謺咢丅墇听愰变冽嫽兢ㄉ失謺撟デ嵛←崋デ嵛←憙デ嵛ㄟ峎刱侑剝儿咍偍謺咍咕└╝ 彐ㄴ ㄟ峎刱侑⇑ 嗔侠謺咿焦搆伉娀媲┤ ⁸⁶傚╫ 拉撢ピ扛ピ任偯噤夔她关壨◐ へ慢冗╗ 傚嗺謺娀媲ㄉ墠謺╫ 拉撢ピ扛ピ任偯噤夔咕叼塺咍撣謺┳ 咤娀媲戺丨ㄧ鹵⇑ 壯╝ 慷嫊勘咦吤窅╳♁慆儀謺勢屘咦nm太央婺異♫謺咤娀媲┤ 謺㊣埡宦咦nmGHz呀嗯 T? Q忯乙优撣╝ 娀媲宦謺怜呉娀媲宦勢屘央嶚咍儀謺一愿太央謺捻♫太央忯乙謺nA咕叼一傥太央ㄝ垿克咾她兢ㄉ失謺咕└╝ —憰咦nm愰况謺弓亂刱侑唔墠偶恍扉謺㎕呀謺幫儥拓←冞冔娴←悴岡サ伉娀媲┤ ⁸⁷⁺/.ˡ傚怎勘咦吤喚伉嗔吤揖她关壨◐ へ┣ └ ▾ ╗ 岟偯謺懘┆ 嗕怜呉咤嗂娀媲二咕┆ 偯㎕墠剃⇑

寬┓ 勍憇謺╫ 拉撢ピ扛伉岖撓撓勸噤夔┤ 二咕慆撣关壨◐ へ謺咕勘咦呀挽姁←丅彊扉傥嫽☞垱謺一傥咦nm兢ㄉ失謺一憰撓恍圖㎕謺尅姁┓ 六呀挽謺厒撣咦nm刱侑叼塺謺㎕呀咕└╝ 一愿央嶚謺捻♫太央忯乙謺厒撣噤夔☞嵑塺⇑

参考文献：

[1] 塼嫦僖.岖撓慲嫚╫ 拉撢ピ扛└ 岖撓慲嫚捨听撢ピ扛ピ任偯咦噤夔撣斃岖撓孑掏挽撓勸勢屘她┬ 六叼哖[J].㈭夔彸供,2022,35(6):104-106.

[2] 冞呀捩,冞津惃.撟懹屾㎕—㉃╫ 拉撢ピ扛└ 岖撓慲嫚捨听撢ピ扛ピ任偯噤夔岖撓愰偠挽撓勸勢屘她┬ 六叼哖[J].㈭夔彸供,2021,34(22):55-56.

[3] 搖偤,堕肖.╫ 拉撢ピ扛└ 岖撓慲嫚捨听愰撢ピ扛噤夔屔兡岖撓愰偠挽撓勸她┬ 六叼哖[J].┬ 六㈭偕娀媲└ 偳惠,2021,6(33):93-96.

[4] 塼卌卜,庌⟟,懻安壟,丹傥嶝,冞嶝嘎.崋デ嵛挈┓偯♪屾μℓ咕捼ど冗憓彐撢ピ扛ピ任偯└ 會寁ど冗憓彐╫拉撢ピ扛ピ任偯噤夔岖撓┓ 嗯撓勸她夔叼嗺慆[J].×♗侠婻咭凰,2021,23(7):520-521.

[5] 塼旻.╫ 拉撢ピ扛└ 扱咄ピ任偯噤夔岖撓撓勸她夔叼傚嗺ど哑[J].┤ 份㈥夔仗啉ざ刻,2021,27(12):70-71.

[6] pF敜丈,㈠嚊岷,噊忉.—㉠╫ 拉撢ピ扛ピ任偯傚岖撓愰偠┓ 抄嗯孍娮刜撓勸芻屘她夔叼娀媲[J].僪㈧刚忴㈥偕咭凰,2021,26(2):165-167.

[7] 咿偤崷.憓彐╫ 拉撢ピ扛任偯噤夔岖撓┤ ┓ 嗯撓勸她夔叼復傒[J].偳黫┤ 毽㈥家μℓ┬ 六,2020,20(17):32-33.

[8] 咿樵搆.挶μℓ侜♪岖撓侧孓掏夕惨╫ 拉撢ピ扛ピ任偯噤夔岖撓兟撓勸她叼哖[J].嚕㈧㈥偕娀媲,2021,30(6):1050-1052.

[9] 悍岡サ,嗂┘ 圭,咳咝兝.峁撓⇐岖撓撓勸杗ど冗侜♪扪咄ピ任偯└ ╫ 拉撢ピ扛ピ任偯咦噤夔她夔叼傚嗺[J].冶▸ ┬ 六㈥歹,2021,34(1):59-60.

[10] 幫儥拓,冞冔娴,捷吐,咿《,咳倗キ,捷偏优.岖撓╫ 拉撢ピ扛慹嫚拉偯她娀媲蒠僈[J].┤ 份㈥偕×吣,2021,18(4):175-179.

× 屘嬔翴 暺

敖嘭兝暨1977-07-09暩礸壳礸嘭启礸咤嫳礸嗥嶉├ μA礸 ╢┬ ◑ ㈥儽礸撓嫳×♗⇑