MRI and Patch Removal

Characteristics of common transdermal patches

Must be removed				
Active drug (brand name)	Manufacturer(s)	Metal Component(s)	Removal required prior to MRI?	
Clonidine	Carapres-TTS (Boehringer- Ingelheim)	Y	Υ	
Diclofenac	Flector (Pfizer)	Υ	Υ	
Fentanyl IONSYS	The Medicines Company	γ	γ	
Lidocaine/Tetracaine	Synera (Galen)	Y	Υ	
Nicotine	Nicoderm (GSK) Habitrol (Novartis)	γ	Y	
Scopolamine	Transderm Scop (Baxter)	γ	γ	
Testosterone	Androderm (Actavis)	Υ	Υ	

May need removal					
Active drug (brand name)	Manufacturer(s)	Metal Component(s)	Removal required prior to MRI?		
Estradiol Transdermal System	Alora (Actavis) Generic (Mylan)	Ν	Y ^a		
Fentanyl Transdermal System	Duragesic (Janssen) Generic (Actavis, Mylan, and Sandoz)	N ^b	N ^b		
Fentanyl Transdermal	Novaplus (Watson)	N ^c	Y ^c		
Nitroglycerin	Nitroglycerin ER (Kremers Urban)	?	Y ^d		
Oxybutynin Chloride	Oxytrol (Watson)	N ^c	Y ^c		

Does not need removal					
Active drug (brand name)	Manufacturer(s)	Metal Component(s)	Removal required prior to MRI?		
Estradiol	Climara (Bayer) Menostar (Bayer) Estraderm (Novartis) Vivelle Dot (Novartis)	N	Ν		
Estradiol/Levonorgestrel	Climara-Pro (Bayer)	N	N		
Estradiol/Norethindrone	Combipatch (Novartis)	Ν	Ν		
Lidocaine	Lidoderm (Endo)	Ν	Ν		
Methylphenidate	Daytrana (Noven)	Ν	Ν		
Nitroglycerin	Minitran (3M) Nitro-Dur (Merck) Generic (Hercon Labs and Mylan)	N	Ν		
Norelgestromin/Ethinyl Estradiol	Ortho Evra (Janssen)	N	N		
Rivastigmine	Exelon (Novartis)	Ν	Ν		
Selegiline	Emsam (Mylan)	Ν	N		

^{*a*} Per Mylan representative, patch does not contain aluminum in backing, but Mylan cannot comment on the presence of additional metallic content in product due to lack of data; therefore, removal of patch prior to MRI is recommended. The package labeling for Alora does not specify the presence of any metals, but Watson does not test the final product for metallic content.

^b Fentanyl patches are listed on the FDA Safety Advisory regarding burn risks with transdermal patches. Per the manufacturers, Actavis, Janssen (Duragesic), Mylan, and Sandoz, the Fentanyl Transdermal System does not contain any metal components that may present burn risks during MRI (Personal communications; June 24-25, 2009).

^c The package insert does not specify presence of any metals, but final product is not tested for metallic content; consider removal of patch per Watson.

^{*d*} No data on metallic content; consider removal of patch.

Additional References:

http://www.ismp.org/docs/fentanyl-brochure.pdf http://dig.pharm.uic.edu/faq/transdermal.aspx http://www.mrisafety.com/SafetyInfov.asp?SafetyInfoID=198