Supplementary Table 1. Results of patch testing with gold in different regions

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| --- | --- | --- | --- | --- | --- |
| First author | Total no. patients | % positive reactions | Clinical relevance (R/Q/P/N) | Test material | Region, years |
| Warshaw, et al.32 | 5106 | 8.7 | NR | Gold sodium thiosulfate 0.5% pet | North America 2003-4 |
| Pratt, et al.31 | 4900 | 10.2 | 10.2/27.1/7.0/NR | Gold sodium thiosulfate 0.5% pet | North America 2001-2 |
| Marks, et al.33 1998-2000 | 5806 | 10.5 | 14.8/29.2/6.9/NR | Gold sodium thiosulfate 0.5% pet | North America 1998-2000 |
| Marks, et al.19 1996-98 | 4101 | 9.5 | 40.6 overall | Gold sodium thiosulfate 0.5% pet | North America 1996-1998 |
| Davis, et al.16 | 375  1105  90  966  1098 | 10.1  18.4  23.3  6.9  20.2 | 42.1/34.2/5.3/18.4  40.4/45.3/3.0/8.9  23.8/71.4/0/4.8  53.7/29.9/4.5/10.4  37.4/47.7/2.7/9.5 | Gold sodium thiosulfate 0.25% pet  0.5% pet  2% pet  Gold chloride 0.5% alc  Potassium dicyanoaurate 0.1% aq | United States  2000-2009 |
| Wentworth, et al.3 | 1904  3081  1110 | 5.8  9.2  17 | 27/54.1/1.8/17.1  23.8/55.7/2.1/18.1  19.6/51.9/4.2/24.3 | Gold sodium thiosulfate 0.25% pet  0.5% pet  2% pet | United States 2006-2010 |
| Davis, et al.34 | 410  3646 | 4.6  13.5 | 36.8/36.8/10.5/15.8  28.5/44.7/4.5/21.1 | Gold sodium thiosulfate  0.25% pet  0.5% pet | United States 2001-2005 |
| Fleming, et al.35 | 1203 | 3.2 | None felt to be clinically relevant as a control group of 105 volunteers had a similar rate of positives (4.8%) | Gold sodium thiosulfate  0.5% pet, 0.05% pet | Scotland  <1998 |
| Fleming, et al.76 | 373 | 2.1 | NR | Gold sodium thiosulfate  0.5% pet, 0.05% pet | Scotland  1996 |
| Sabroe, et al.36 | 100 | 13 | 53.8 overall | Gold sodium thiosulfate  0.5% pet | England  1995 |
| McKenna, et al.37 | 278 | 4.6 | 46 overall | Gold sodium thiosulfate 0.5% pet | Ireland  1994 |
| Bruze, et al.45 | 1056 | 10.0 | NR | Gold sodium thiosulfate 0.5% pet | Sweden  1991-1993 |
| Bjorkner, et al.38 | 823 | 8.6 | NR | Gold sodium thiosulfate 0.5% pet | Sweden  1991-1992 |
| Silva, et al.39 | 2853  2853 | 0.8  0.07 | NR  NR | Gold sodium thiosulfate 0.5% pet  Potassium cyanoaurate 0.1% aq | Portugal  1995 |
| Trattner, et al.40 | 406 | 8.4 | 5.9 overall | Gold sodium thiosulfate 0.5% pet | Israel  <2000 |
| Boonchai, et al.41 | 852 | 30.7 | 14.6 overall | Gold sodium thiosulfate 0.5% pet | Thailand  2000-2009 |
| Nonaka, et al.43 | 931 | 5.9 | NR | Gold chloride 0.2% aq, gold sodium thiosulfate 0.5% pet | Japan  1990-2009 |
| Nakada, et al.42 | 377 | 10.3 | NR | Gold chloride 0.2% aq | Japan  1989-1995 |
| Lee, et al.44  2001 | 255 | 3.1 | Clinical relevance “minimal” | Gold sodium thiosulfate 0.5% pet | Korea  1998-2000 |

NR = not reported

R = clinically relevant

Q = questionably relevant

P = formerly relevant

N = not relevant

Supplementary Table 2.

Case reports of cutaneous contact allergy to gold in the English language

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| First author | Source of exposure | Type of reaction | No. patients | Region, year |
| Forster, et al.79 | 14k gold orbital implants | Allergic contact dermatitis involving eyelids and periorbital region | 1 | United States, 1949 |
| Chenoweth, et al.53 | 18k gold ring and watch | Dermatitis of the hands and forearms | 1 | Australia,  1957 |
| Cowan, et al.54 | 11k gold ring, gold sleepers | Allergic contact dermatitis of the ring finger and earlobes | 1 | England,  1960 |
| Fox, et al.55 | Gold rings and watch | Allergic contact dermatitis under jewelry | 1 | United States, 1961 |
| Shelley, et al.64 | Crystals of gold trichloride | Chronic papular eruption at site of contact on right forearm | 1 | United States, 1963 |
| Comaish, et al.56 | 9k gold earrings, 18k gold rings, gold watch | Allergic contact dermatitis under jewelry, appeared on other ring finger when ring transferred to the other hand | 1 | England, 1969 |
| Elgart, et al.57 | Gold earrings, ring, and wristwatch, gold crown | Allergic contact dermatitis under jewelry, irritation of gingiva mucosa around crown | 1 | United States,  1971 |
| Petros, et al.58 | Gold earrings | Allergic contact dermatitis and papular dermal reaction of the earlobes | 1 | England, 1973 |
| Young59 | Gold earrings and ring | Nodular pruritic dermatitis under jewelry | 1 | Netherlands,  1974 |
| Iwatsuki, et al.69 | Gold earrings | Lymphomatoid allergic contact dermatitis of the earlobes | 3 | Japan, 1987 |
| Fowler, et al.60 | 14k gold earrings, gold necklace and ring | Allergic contact dermatitis under jewelry | 2 | United States, 1988 |
| Aoshima, et al.70 | Gold earrings | Granulomatous allergic contact dermatitis | 1 | Japan,  1988 |
| Goh, et al.108 | Gold plating | Allergic contact dermatitis of the hands and forearms | 1 | Singapore,  1988 |
| Kobayashi, et al.71 | Gold earrings | Lymphocytoma cutis-like allergic contact dermatitis of the earlobes | 1 | Japan,  1992 |
| Osawa, et al.61 | Gold earrings | Allergic contact dermatitis of the earlobes | 1 | Japan,  1994 |
| Tan, et al.66 | Gold smelting | Airborne allergic contact dermatitis of the forehead and forearms | 1 | Australia,  1996 |
| Armstrong, et al.72 | Gold earrings | Granulomatous contact dermatitis | 1 | Ireland,  1997 |
| Fleming, et al.73 | Gold earrings | Lymphomatoid allergic contact dermatitis of earlobes and retroauricular eczematous plaques | 1 | Scotland,  1997 |
| Wiesner, et al.62 | Gold earrings, ring, necklace, bracelet | Allergic contact dermatitis under jewelry | 1 | Germany,  1998 |
| Estlander, et al.67 | Gold plating, metallic gold | Allergic contact dermatitis of the fingers and eyelids, conjunctivitis | 1 | Finland,  1998 |
| Suzuki77 | Gold earrings | Allergic contact dermatitis of earlobes | 3 | Japan,  1998 |
| Sperber, et al.4 | Jewelry sales, gold etching | Hand dermatitis that resolved when away from work (the authors also present a third case, of chronic diffuse papular dermatitis unclear if due to gold) | 2 | United States, 2003 |
| Nagashima, et al.74 | 18k gold earrings | Granulomatous allergic contact dermatitis of the earlobes | 1 | Japan,  2004 |
| O’Donoghue, et al.63 | Gold on a hearing aid mold, 9k gold ring (however, also allergic to nickel and plastic) | Allergic contact dermatitis on the right concha, tragus, preauricular, ring finger | 1 | England,  2004 |
| Conde-Taboada, et al.75 | Gold earrings | Lymphomatoid contact dermatitis of the earlobes | 1 | Spain,  2007 |
| Bjorkner, et al.89 | Gold eyelid weights, + gold ring in 1 patient | Eyelid erythema and swelling, + periorbital and ring finger dermatitis in 1 patient | 4 | Sweden,  2008 |
| Mehta, et al.68 | 22k gold nose ring, 18k gold earrings | Nodular contact dermatitis at sites of piercings | 2 | India,  2010 |
| Giorgini, et al.65 | Gilding, gold plating | Airborne contact dermatitis with involvement of the eyelids, +/- glabella, neck | 2 | Italy, 2010 |