**Supplementary Table 1**.

Previous studies reporting cases of pyoderma gangrenosum associated with different solid malignancies.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **STUDY** | **SITE** | **SOLID K, onset/stage** | **TIMING PG in relation to K** | **TREATMENT for PG** | **TREATMENT for K** | **OUTCOME PG** | **OTHER ASSOCIATED RISK FACTORS** |
| **Lee 1976**[1]  Case report | Legs | Ileum (carcinoid tumor), new (found at autopsy) | 1.5 year before | Topic (hexachlorophene) + systemic (prednisone 40mg) | NA | Partial response (patient died after 12 weeks) | None |
| **Beurey 1977**[2]  Case report | Leg and breast (on the incision scar) | BC | NA | Systemic (clofazimine) | Surgery | Complete response with clofazine | Monoclonal dysglobulinemia a2k2 |
| **Thomsen 197**[3]**9**  Case report | NA | CRC | 8 years after surgery | Systemic (clofazimine) | Surgery | Complete response with clofazimine | NA |
| **Ortonne 1979**[4]  Case report | Leg | OC | 2 years later | Systemic (corticosteroids, clofazimine) | Alkylating agents (Melphalan) | NA (patient died rapidly) | Myelomonocytic leukaemia concomitantly with pyoderma |
| **Powell 1985**[5]  Review | NA | Bladder cancer stage IV | NA | NA | NA | NA | None |
| NA | PC stage IV | NA | NA | NA | NA | None |
| NA | CRC stage IV | NA | NA | NA | NA | Ulcerative colitis |
| **Kuhn 1985**[6]  Case report | NA | Oral cancer | 17 years before | NA | NA | NA | Selective Ig-A deficiency |
| **Cole 1989**[7]  Case report | NA | Adrenocortical carcinoma | NA | NA | Surgery | Complete response after tumor resection | NA |
| **Prystowsky 1989**[8]  Retrospecitve anaylis | Arms, leg | SCC | NA | Topic (costicosteroids) | NA | NA | Chron disease |
| **Baruch 1990**[9]  Case report | Breast | BC | 7 days after surgery (mastectomy) | NA | Surgery | NA | NA |
| **Maigre 1991**[10]  Case report | Buttock | BC stage IV | NA  (few days after intramuscular injection) | Systemic (corticosteroids, clofazimine) | CT | Complete response | NA |
| **Basille 1992**[11]  case report | Arms | Parotid gland cancer (acinous cell cancer) | NA | Systemic (clofazimine) | Surgery + corticosteroids | Complete response after surgery and corticosteroids | NA |
| **Bayle-Lebey 1995**[12]  Case Report | Shoulder | Hypopharynx (adenocarcinoma) | NA | NA | Surgery | Complete response | NA |
| **Gallo 1995**[13]  Case report | Legs | GC (signet ring cell carcinoma) | Synchronous | Systemic (cyclosporine) | Surgery (gastrectomy) | Complete response after surgery | None |
| **Von den Driesch 1997**[14]  Prospective study |  | GBM | NA | NA | NA | NA | NA |
| **Hughes 2000**[15]  Retrospective analysis | Peristoma | Bladder cancer | 11 months after | Topic (cromolyn sodium, Clobetasol propionate) + systemic (dapsone, mycophenolate mofetil, prednisone) | Surgery | No response | None |
| Peristoma | Bladder cancer | 20 years after | Topic (triamcinolone acetonide, Clobetasol propionate) | Surgery | Complete response | None |
| Peristoma | Rectal cancer | 20 years after | Topic (triamcinolone acetonide, Clobetasol propionate) | Surgery | Complete response | None |
| **Labat 2000**[16]  Case report | Breast (on mastectomy scar) | BC, stage IV | 19 months after surgery; concomitant to discovery of liver metastasis | NA | Surgery (mastectomy) | Failure | NA |
| **Cailhol 2003**[17]  Case report | NA | CRC stage IV | NA | Systemic (corticosteroids) | NA | NA | NA |
| **Meier 2003**[18]  Case report | Legs, hands | Renal carcinoma | Concomitant | Systemic (corticosteroids, dapsone) | Surgery (nephrectomy) + CT (thalidomide) | Partial response with thalidomide | Ig-A monoclonal dysglobulinemia |
| **Sakai 2006**[19]  Case report | Peristoma | GC + CRC | 40 days after surgery (ileostomy) | Topic (corticosteroids) | Surgery | Complete response | None |
| **Franca 2006**[20]  Case report | Foot, then spread all over the body | GC (signet ring cell carcinoma), stage IV | Synchronous | Systemic (corticosteroids) | CT | Partial response with CT for K | None |
| **Jutley 2007**[21]  Case report | Scar of sternotomy (for coronary artery bypass) | NSCLC-squamous | 4 days after sternotomy, 22 months before K diagnosis | Systemic (corticosteroids) | NA | Complete response | NA |
| **Bunte 2008**[22]  Case report | Scapula | CRC | 4 months before | Topic (corticosteroids) + systemic (prednisolone, tacrolimus, azathioprine) | Surgery (hemicolectomy) + CT | Complete response after surgery and CT | None |
| **Descheemaeker 2008**[23]  Case report | Breast (scar) | BC | 7 days after surgery for DCIS | Systemic (corticosteroids) | Surgery (tumorectomy)+ RT + adj OT (Tam+LHRHa) | Complete response | None |
| **Campbell 2010**[24]  Case report | Abdomen | Ileum (carcinoid tumor) | 7 days after surgery (hemicolectomy) | Systemic (prednisolone, somatostatin, azathioprine) | Surgery | Complete response | None |
| **Regnier-Rosencher 2011**[25]  Case report | Leg | Kidney cancer (adenocarcinoma) | Synchronous | Surgery (excision) + topic (corticosteroid) | Surgery | Complete response | None |
| **AL Ghazal 2012**[26]  Retrospecitve analysis | NA | BC(2); PC, GBM; Melanoma(2) | Subsequent | NA | NA | NA | NA |
| **Pereira 2013**[27]  Retrospective analysis | Limb | CRC | 40 months before | Systemic (corticosteroids) | NA | Complete response | NA |
| Limb | PC | 60 months after | Systemic (corticosteroids, cyclosporine) | NA | Complete response | NA |
| **Al Ghazal 2013**[28]  Retrospective analysis | NA | BC(6); Lung Cancer(3); PC(3); Melanoma(3); HCC(2) OC(2);CRC; Laryngeal Cancer, GBM | NA | NA | NA | NA | NA |
| **Duchnowska 2014**[29]  Case report | Leg | BC | 4 years earlier | Systemic (dapsone, corticosteroids, cyclosporine, sufazalazine)  Topic (detromycin ointment, silicon dressing, potassium permanganate) | Endocrine therapy (started 5 months after PG diagnosis), then surgery and adjuvant endocrine therapy (letrozole) | Continuous healing of PG (until complete response) in line with partial response of BC | Rheumatoid arthritis |
| **Shahi 2015**[30]  Retrospective analysis | Lower extremity | Ileum (adenocarcinoma), new | 1 month before | Topic (tacrolimus) | Surgery | Complete response with tacrolimus | None |
| Lower extremity | BC, new | 2 months before | Topic (tacrolimus, triamcinolone) + systemic (prednisone 60 mg) | Surgery | Complete response with therapy for PG | None |
| Lower extremity | CRC stage IV, new | Synchronous | Systemic (prednisone 80mg, minocycline, methylprednisolone 250mg) | Surgery | Partial response with therapy for PG + K | Ulcerative colitis |
| Breast | BC, new | 1 month after | Systemic (prednisone 80mg, mycophenolate mofetil 2000mg, tetracycline 500mg) | Surgery + CT | Partial response with therapy for PG | None |
| Upper extremity | BC, recurrent | 3 months after | Topic (triamcinolone) + systemic /cyclosporine, prednisone 40 mg, IVIG 2g/kg) | Surgery + CT + RT | No response | None |
| **Mori 2015**[31]  Case report | Chest and face (sites of surgery) | Melanoma | 8 months after surgery |  | Surgery | Died (congestive heart failure) | None |
| **Miguel-Gomez 2015**[32]  Case report | Peristoma | CRC | 6 months after surgery | Topic (tacrolimus ointment)  Systemic (corticosteroids)  Closure of the stoma | Surgery | Partial response | NA |
| **Turrion-Merino 2016**[33]  Retrospective analysis | Peristoma | CRC | 22 weeks after surgery | Topic (tacrolimus ointment)  Systemic (corticosteroid, azathioprine), closure of the stoma | Neoadjuvant RT, Surgery | No response to topic, partial response to systemic, complete response to closure of the stoma | None |
| **Jockenhofer 2016**[34]  Retrospective analysis | NA | PC(3); Melanoma;BCC; Fibrosarcoma; GBM; BC; Cervix Cancer; Uterus Cancer; CRC (2)r; Lung Cancer | NA | NA | NA | NA | NA |
| **Patel 2017**[35]  Case report | Breast | BC | Immediately after breast surgery | Systemic (corticosteroids, cyclosporine) | Surgery | Complete response  (scar) | NA |
| Breast | BC | 11 days after breast surgery | Systemic (corticosteroids, cyclosporine; IVIG) | Surgery | Complete response  (scar) | NA |
| Breast | BC | 8 days after breast surgery | Systemic (corticosteroids, cyclosporine) | Surgery | Complete response  (scar) | NA |

List of abbreviation: BC, breast cancer; CRC, colorectal cancer; OC, ovarian cancer; PC prostate cancer; SCC, squamous cell carcinoma; GC, gastric cancer; GBM, glioblastoma multiforme; NSCLC, non-small cell lung cancer; HCC, hepatocellular carcinoma

1 Lee SS, Biro L, Price E. Pyoderma gangrenosum with carcinoid tumor. Cutis 1976;18:791-794.

2 Beurey J, Weber M, Delrous JL et al. Pyoderma gangrenosum: Clofazimine therapy. Ann Dermatol Venereol 1977;104:631-634.

3 Thomsen K, Rothenborg HW. Clofazimine in the treatment of pyoderma gangrenosum. Arch Dermatol 1979;115:851-852.

4 Ortonne JP, Thivolet J, Chouvet B et al. Pyoderma gangrenosum, ovarian carcinoma treated with Melphalan and acute myelomonocytic leukaemia: report of one case and literature review (author's transl). Ann Dermatol Venereol 1979;106:251-256.

5 Powell FC, Schroeter AL, Su WP et al. Pyoderma gangrenosum: a review of 86 patients. Q J Med 1985;55:173-186.

6 Kuhn A. Ulcerative dermatitis (pyoderma gangrenosum) with selective IgA deficiency and development of an oral carcinoma. Z Hautkr 1985;60:79-82.

7 Cole HG, Nelson RL, Peters MS. Pyoderma gangrenosum and adrenocortical carcinoma. Cutis 1989;44:205-208.

8 Prystowsky JH, Kahn SN, Lazarus GS. Present status of pyoderma gangrenosum. Review of 21 cases. Arch Dermatol 1989;125:57-64.

9 Baruch J, Julien M, Touraine R et al. Postoperative pyoderma gangrenosum and cancer of the breast. Apropos of a case. Ann Chir Plast Esthet 1990;35:73-75.

10 Maigre M, Bouachour G, Varache N et al. Pseudo-septicemic pyoderma gangrenosum and breast cancer. Apropos of a case caused by an intramuscular injection. Rev Med Interne 1991;12:452-454.

11 Basille W, Dompmartin A, Lorier E et al. Pyoderma gangrenosum. Association to acinar cell carcinoma of the parotid gland. Ann Dermatol Venereol 1992;119:381-383.

12 Bayle-Lebey P, Periole B, David JF et al. Paraneoplastic pyoderma gangrenosum. Ann Med Interne (Paris) 1995;146:585-587.

13 Gallo R, Parodi A, Rebora A. Pyoderma gangrenosum in a patient with gastric carcinoma. Int J Dermatol 1995;34:713-714.

14 von den Driesch P. Pyoderma gangrenosum: a report of 44 cases with follow-up. Br J Dermatol 1997;137:1000-1005.

15 Hughes AP, Jackson JM, Callen JP. Clinical features and treatment of peristomal pyoderma gangrenosum. Jama 2000;284:1546-1548.

16 Labat JP, Simon H, Metges JP et al. Pyoderma gangrenosum and breast cancer: a new case. Ann Med Interne (Paris) 2000;151:314-315.

17 Cailhol J, Viard JP, Dupont B et al. Cutaneous and extracutaneous pyoderma gangrenosum associated with sigmoid adenocarcinoma. Gastroenterol Clin Biol 2003;27:955-957.

18 Meier F, Berner D, Scherwitz C et al. An unusual case of pyoderma gangrenosum with necrotizing granulomatous dermatitis. J Dtsch Dermatol Ges 2003;1:302-305.

19 Sakai H, Otsubo S, Iizuka H. Peristomal pyoderma gangrenosum associated with rectal adenocarcinoma. J Dermatol 2006;33:68-70.

20 Franca AE, Salvino LK, Leite SH et al. Pyoderma gangrenosum as first clinical manifestation of gastric adenocarcinoma. J Eur Acad Dermatol Venereol 2006;20:440-441.

21 Jutley RS, Varughese V, Sulley I et al. Pyoderma gangrenosum after sternotomy: an early presentation of lung carcinoma. J Cardiovasc Surg (Torino) 2007;48:394-395.

22 Bunte C, Popp-Habeler J, Mischer P et al. Concomitant manifestation of pyoderma gangrenosum and colorectal carcinoma. Scand J Gastroenterol 2008;43:756-758.

23 Descheemaeker V, Aillet S, Morcel K et al. Pyoderma gangrenosum and breast cancer: a case report. J Gynecol Obstet Biol Reprod (Paris) 2008;37:618-621.

24 Campbell W, Baird E, Murtagh K et al. Post-operative pyoderma gangrenosum in association with ileal carcinoid tumour. Ulster Med J 2010;79:102-103.

25 Regnier-Rosencher E, Bizet N, Mery L. Pyoderma gangrenosum associated with renal carcinoma. J Am Acad Dermatol 2011;64:1208-1211.

26 Al Ghazal P, Korber A, Klode J et al. Investigation of new co-factors in 49 patients with pyoderma gangrenosum. J Dtsch Dermatol Ges 2012;10:251-257.

27 Pereira N, Brites MM, Goncalo M et al. Pyoderma gangrenosum--a review of 24 cases observed over 10 years. Int J Dermatol 2013;52:938-945.

28 Al Ghazal P, Herberger K, Schaller J et al. Associated factors and comorbidities in patients with pyoderma gangrenosum in Germany: a retrospective multicentric analysis in 259 patients. Orphanet J Rare Dis 2013;8:136-1172-8-136.

29 Duchnowska R, Ziajka E, Goralska A et al. Recurrent pyoderma gangrenosum precipitated by breast cancer: a case report and review of the literature. J Med Case Rep 2014;8:226-1947-8-226.

30 Shahi V, Wetter DA. Pyoderma gangrenosum associated with solid organ malignancies. Int J Dermatol 2015;54:e351-7.

31 Mori T, Hiraiwa T, Ohtsuka M et al. Late-onset pyoderma gangrenosum following surgical operation in a patient with malignant melanoma. J Dermatol 2015;42:650-651.

32 Miguel-Gomez L, Hermosa-Zarza E, Munoz-Zato E et al. Peristomal pyoderma gangrenosum associated with colon cancer. Med Clin (Barc) 2015;144:529.

33 Turrion-Merino L, Hermosa-Zarza E, Miguel L et al. A Case Series of 4 Patients With Peristomal Pyoderma Gangrenosum: Review of Risk Factors and Treatment Response. Actas Dermosifiliogr 2016;107:e13-7.

34 Jockenhofer F, Herberger K, Schaller J et al. Tricenter analysis of cofactors and comorbidity in patients with pyoderma gangrenosum. J Dtsch Dermatol Ges 2016;14:1023-1030.

35 Patel DK, Locke M, Jarrett P. Pyoderma gangrenosum with pathergy: A potentially significant complication following breast reconstruction. J Plast Reconstr Aesthet Surg 2017;70:884-892.