**Table S1.** Variables assessed for each dog and all possibilities separated by comma

|  |  |  |
| --- | --- | --- |
| **Category** | **Variable** | **Options** |
| **Signalment** | Case number  Patient and owner name  Age  Year of presentation  Month of presentation  Sex  Reproductive status  Breed  Weight | In years  yyyy  mm  Female, male  Castrated, intact  Name  Kilogram |
| **History and clinical data** | Age of first sting  Grade of current sting  Grad of previous sting  Number of total stings  Interval between stings  Time of day  Gallbladder wall oedema  Alanine Aminotransferase increase  Situation  Observed insect stings | In years  0, 1, 2, 3  0, 1, 2, 3  Number  mm  Morning, midday, afternoon, evening/night  Yes, no, did not check  Yes, no, did not check  While walking, in garden, on balcony, other,  Yes, suspected, no |
| **Treatment** | Hospitalization  Duration of hospitalization  Antihistamine  Glucocorticoids  Gastrointestinal protectants  Adrenaline  Infusion  Venom Immunotherapy  Other treatments | Yes, no  Hours  Yes, no, unknown  Yes, no, unknown  Yes, no, unknown  Yes, no, unknown  Yes, no, unknown  Yes, no  Analgesics, antiemetics, NSAIDs, antibiotics, dietary supplements, other |
| **Trigger** | Trigger group  Specific identification of allergen  Localization of sting  Provocation  Allergy testing  Previous trigger | Hymenoptera, food, medication, other  Bee, wasp, hornet, bumble, unknown  Paw, face, generalized, oral cavity other, unknown  Yes, no  Yes, no  Bee, wasp, hornet, bumblebee |
| **Comorbidities** | Atopic dermatitis  Infectious bowel disease  Other  Concurrent medication | Yes, no  Yes, no  Name  Name |

**Table S2.** Questionnaire for owners with dogs stung by Hymenoptera

|  |  |
| --- | --- |
| **Questions** | **Possible answers** |
| Has your dog been stung again by an Hymenoptera?  By which insect was your dog stung?  How much time passed between the separate stings?  In which context did the sting occur?  Where was your dog stung?  What symptoms did your dog exhibit after the sting?  How did the reaction compare to the previous one?  What did you do after re-sting? | Yes, no, maybe  Bee, wasp, bumblebee, hornet, unknown  < 2 months, 2-12 months, 1-3 years, > 3 years, unknown  While walking, in the garden, on the balcony, other location  Paw, head, oral cavity, other  Itching, swelling, redness of the skin, single episode of diarrhea or vomiting, multiple episodes of diarrhea or vomiting, dyspnea, loss of consciousness, collapse, pallor, no symptoms, other  Milder, same, more severe, unknown  Administration of medication, injection of epi-pen, veterinary visit, stinger extraction, other |
| Have your dog’s insect stings affected your quality of life? | Yes, no |
| Have you changed your lifestyle due to your dog’s insect stings? | Yes, no |
| Has your dog developed new allergies since the first sting? | Yes, food, environmental allergens, medication, other, no |
| Does your dog like to play with insects? | Yes, no |
| Do you own an epi-pen for your dog? | Yes, no |
| Have you heard of allergen-specific immunotherapy? | Yes, no |
| Do you think an insect allergy can be cured by allergen-specific immunotherapy | Yes, no, I don’t know |

**Table S3. Bivariate analysis (fisher’s exact test) of factors associated with severe anaphylaxis.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Variables** | **Number of dogs** | **Odds ratio** | **CI 95%** | **p- value** |
| Age < 2 years  Weight < 10 kg  Male sex  Purebred  > 1 episode  < 2m interval  Previous systemic reaction  Daytime  Sting in oral cavity  Bee venom  CAD  Comorbidity | 100 | 1.69 | 0.87 – 3.33 | 0.12 |
| 91  71  143  43  12  10  99  35  55  7 | 1.58  1.14  1.96  1.26  1.72  0.82  1.31  3.02  1.79  0.27 | 0.82 – 3.06  0.58 – 2.20  0.82 – 5.13  0.49 – 3.16  0.44 – 6.73  0.12 – 5.51  0.65 – 2.68  1.32 – 7.08  0.89 – 3.60  0.01 – 2.27 | 0.17  0.75  0.12  0.66  0.37  1  0.51  <0.01\*  0.09  0.26 |
| 14 | 1.73 | 0.49 – 6.08 | 0.39 |