TINGKAT KESEJAHTERAAN SAPI YANG DIPOTONG DENGAN TEKNIK YANG BERBEDA

INTISARI

Reza Pratama Putra
16/403990/PPT/00957

Penelitian ini bertujuan untuk membandingkan tingkat kesejahteraan sapi yang disembelih pada RPH dengan metode *stunning* dan tanpa *stunning.* Total 50 ekor sapi yang terdiri atas 25 ekor sapi disembelih dengan metode pemingsanan (PMG) menggunakan *cash magnum knocker* dan 25 ekor sapi disembelih tanpa pemingsanan (tPMG). Parameter yang diamati meliputi tingkat kesejahteraan ternak pra penyembelihan, serta status fisiologi dan kadar hormon kortisol pasca penyembelihan. Parameter tingkat kesejahteraan ternak yang diamati meliputi pergerakan sapi selama di *gangway* yaitu sejak dari kandang penampungan menuju ke restraining box, penanganan selama di restraining box sebelum sapi dipingsankan atau disembelih, dan kenyamanan serta tekanan pada sapi selama berada di restraining box. Penilaian status fisiologis pasca penyembelihan meliputi keteraturan pernafasan, pengeluaran suara, dan tendangan kaki. Kadar hormon kortisol dihitung menggunakan metode *enzyme-linked immunosorbent assay*. Perbedaan nilai antar kelompok dianalisis dengan menggunakan uji T, dan hubungan kadar kortisol dengan status fisiologis dan kesejahteraan ternak dianalisis menggunakan uji korelasi *pearson two-tailed*. Skor kelancaran pergerakan sapi di *gangway* menuju ke *restraining box*, penanganan sapi di dalam restraining box, dan kenyamanan pada kelompok tPMG dan kelompok PMG berturut-turut masing-masing adalah 1,96±0,67 dan 2,60±0,50; 2,00±0,0 dan 2,92±0,28; 2,00±0,0 dan 2,76±0,44. Skor tingkat kesejahteraan kedua kelompok tersebut berbeda tidak nyata. Skor keteraturan pernafasan, pengeluaran suara, dan tendangan kaki kelompok tPMG dan kelompok PMG berturut-turut masing-masing adalah 2,12±0,33 dan 2,92±0,28; 2,00±0,0 dan 2,60±0,71; 1,80±041 dan 2,32±0,69. Skor fisiologis pasca penyembelihan kedua kelompok tersebut berbeda tidak nyata. Konsentrasi kortisol kelompok tPMG (131.56±83 ng/ml) lebih tinggi (p<0,01) dari pada kelompok PMG (57.48±28.07 ng/ml). Koefisien korelasi antara kadar kortisol dengan pergerakan sapi di *gangway*, penanganan sapi di dalam restraining box, dan kenyamanan sapi di dalam restraining box, keteraturan pernafasan, pengeluaran suara, dan tendangan kaki berturut turut adalah -0,79; -0,52; -0,51; -0,59; -0,43; dan -0,58. Semakin tinggi kadar kortisol semakin rendah tingkat kesejahteraanya. Disimpulkan bahwa pemingsanan sebelum penyembelihan meningkatkan tingkat kesejahteraan ternak.

Kata Kunci : Kesejahteraan Ternak, Sapi, Stres, Teknik pemotongan.

THE ANIMAL WELFARE OF CATTLE SLAUGHTERED AT DIFFERENT METHODS

ABSTRACT

Reza Pratama Putra
16/403990/PPT/00957

The study was conducted to compare the animal welfare of cattle slaughtered with stunning and without stunning. Fifty head of cattle were divided into two groups, i.e 25 cattle were slaughtered with stunning method (PMG) used cash magnum knocker and 25 head were slaughtered without stunning method (tPMG). The variables observed included the level of pre-slaughter welfare, as well as post slaughter fisiological statue and cortisol hormone levels. The parameters of animal welfare aspect included the movement of cattle while in the gangway, from the lairage to the restraining box, handling on the restraining box before the cattle were stunned or slaughtered, and pressure on the cattle on the restraining box. Post-slaughter fisilogical statue includes breathing regularity, sound release, and leg kicks. Cortisol hormone levels were calculated using the enzyme-linked immunosorbent assay method. The data collected were analyzed using the T-test, and the relationship of cortisol levels between slaughter stress levels and livestock welfare using a two-tailed *Pearso*n correlation test. The movement of cattle in the gangway to the restraining box, handling of cattle in the restraining box, and comfort level in the restraining box scores of the tPMG and PMG groups were 1.96 ± 0.67 and 2.60 ± 0,50; 2.00 ± 0.0 and 2.92 ± 0.28; 2.00 ± 0.0 and 2.76 ± 0.44 respectively. The scores of the tPMG group and PMG group was not significantly differece scores between them. Breathing regularity, sound release, and legs kicks scores of the tPMG and PMG groups were 2.12 ± 0.33 and 2.92 ± 0.28; 2.00 ± 0.0 and 2.60 ± 0.71; 1.80 ± 041 and 2.32 ± 0.69, respectively. There was no significant difference phisiologal statues scores between them. Cortisol concentrations of the tPMG group (131.56 ± 83 ng/ml) were higher (p <0.01) than that of the PMG group (57.48 ± 28.07 ng/ml). Coefficient corelation betwen cortisol levels and the movement of cattle in the gangway, handling of cattle in a restraining box, and comfort level of cattle in a restraining box, regular breathing, sound release, and leg kicks were -0.79; -0,52; -0,51; -0,59; -0,43; and -0.58 respectively. The higher cortisol concetration, the lower welfare level. It is cocluded that stunning before slaughtering improve animal welfare of cattle.

Keywords : Animal welfare, Cattle, Stress, Slaughter methods